

UNIVERSITÉ DU QUÉBEC À MONTRÉAL

CORPORATE GOVERNANCE, STRATEGIC CAPABILITIES OF BOARDS
OF DIRECTORS AND FIRM PERFORMANCE: THE CASE OF MERGERS
AND ACQUISITIONS

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ADMINISTRATION

BY
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UNIVERSITÉ DU QUÉBEC À MONTRÉAL

GOUVERNANCE D'ENTREPRISE, CAPACITÉS STRATÉGIQUES DES
CONSEILS D'ADMINISTRATION ET PERFORMANCE: LE CAS DES
FUSIONS ET ACQUISITIONS

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RÉSUMÉ

La recherche en gouvernance d'entreprise traitant du rôle des conseils d'administration s'est principalement intéressée à sa dimension fiduciaire tout en reléguant la dimension stratégique de ce rôle à un niveau secondaire. Cette préoccupation, axée principalement sur la fonction de contrôle et de surveillance attribuée aux conseils d'administration, est largement due à la domination de la théorie de l'agence qui met un accent particulier sur la réduction des coûts d'agence comme étant l'extrant principal de tout système de gouvernance efficace.

Cependant, et malgré son apport considérable en termes de définition du problème et des enjeux fondamentaux de la gouvernance qui découlent, notamment, de la séparation entre la propriété et le contrôle, force est de constater qu'au niveau normatif, les théoriciens de l'agence proposent des solutions limitées et généralement basées sur une vision unidimensionnelle, simpliste et largement instrumentale appliquée à un concept complexe et multidimensionnel comme celui portant sur le rôle que les conseils d'administration doivent remplir de nos jours.

Corollairement, la présente étude vise à investiguer, comment la gouvernance d'entreprise doit être étendue, notamment en intégrant la perspective de la gouvernance créatrice de valeur (Allaire et Firsirotu, 2003; 2004; 2009) et la perspective basée sur les ressources, de manière à ce que les conseils d'administration puissent jouer un rôle plus stratégique dans les processus de création de valeur de l'entreprise au lieu de se confiner à un rôle de surveillance, de mécanisme disciplinaire ou d'instrument informationnel comme le présuppose la perspective traditionnelle de la théorie de l'agence. La présente thèse porte essentiellement sur le rôle des conseils d'administration et leur contribution à la performance de l'entreprise dans des contextes de prise de décision sensiblement critiques comme ceux que supposent les opérations de fusions et acquisitions.

En utilisant les régressions logistiques et les régressions multiples classiques, nous avons tenté de déterminer les attributs susceptibles de prédire d'une manière significative les acquisitions à succès, ainsi que les attributs qui affecteraient positivement ou négativement la performance découlant des opérations de fusions et d'acquisitions.

Nos résultats démontrent que la *légitimité* des conseils d'administration lorsqu'elle est basée sur des processus de sélection et de nomination de qualité est positivement reliée à la probabilité d'accomplir des acquisitions réussies. Par ailleurs, nos résultats démontrent également que l'indépendance des conseils, lorsqu'elle est estimée par la proportion des membres indépendants externes, est plutôt négativement reliée à la probabilité de réaliser des acquisitions réussies. En ce qui concerne, la *crédibilité* du conseil, celle-ci est positivement reliée à la probabilité de procéder à des acquisitions réussies lorsqu'elle est basée sur une grande diversité des profils professionnels des administrateurs composant le conseil d'administration et lorsque ces

derniers possèdent collectivement une expérience moyenne supérieure à celle des managers, en ce qui a trait aux industries dans lesquelles l'entreprise acquéreuse opère.

Nos résultats démontrent également que les capacités stratégiques des conseils d'administration, caractérisées par une distance fonctionnelle, un niveau d'éducation similaire et une distance d'âge élevés entre les membres du conseil et le CEO, sont positivement reliées à la probabilité de réaliser des acquisitions réussies.

Finalement, la diversité des profils professionnels des administrateurs composant le conseil d'administration, le niveau d'expérience spécifique à l'industrie de l'acquéreur et la similarité des niveaux d'éducation entre le CEO et les membres du conseil sont tous positivement reliés à l'amélioration du rendement sur les actifs (ROA) dans le cas des acquisitions réussies.

Mots clés : gouvernance d'entreprise, conseil d'administration, crédibilité, légitimité, capacités stratégiques, fusions et acquisitions, théorie de l'agence, théorie de l'intendance, théorie institutionnelle, l'approche basée sur les ressources, gouvernance créatrice de valeur.

ABSTRACT

Corporate Governance research has generally focused on the board of directors' fiduciary function and relegated its strategic role to a second order aspect of board duties. This reliance on the monitoring function of the board is largely attributable to the domination of the agency theory and its emphasis on the agency cost reduction as the main output of corporate governance systems. However, and despite of its strong and well articulated theoretical framework in outlining the governance problem that stems from the separation of ownership and control, agency theory has provided a limited unitary, simplistic and instrumental conception of a complex and multifaceted role that the board are actually called to play.

The present study investigated how corporate governance should be extended, using the Value creating Governance Perspective (Allaire and Firsirotu, 2003; 2004; 2009) and the RBV perspective in order for boards to play a more strategic role in the firm's value creation processes, rather than sticking to monitoring and disciplining function rooted in the traditional agency perspective. This dissertation proposes to study the role of board of directors in the most sensitive area of Merger and Acquisition decisions to assess their contribution to firm performance.

Through Logistic and OLS regressions, we assessed which governance attributes predicted better successful acquisitions and which ones, have a significant impact on post- acquisition performance. We found that Board *Legitimacy* based on the quality of Directors' selection and nomination processes, along with Board *Credibility* based on Director's occupational backgrounds diversity and firm industry specific experiences are positively associated with the probability of making successful acquisitions. We also found that strategy processes and dialogue between the Board and management operationalized through *Board Strategic Capabilities* are positively related with the probability of making successful acquisition for firms with higher Board-CEO functional distance, higher Board-CEO educational level similarity and higher Board-CEO age distance. We finally found that Directors' occupational diversity, Industry specific experiences and Board-CEO educational level similarity were positively related with the improvements in the acquirers' ROA in the case of successful acquisition.

Key words: Corporate governance, Board of directors, Strategic Capabilities, Mergers, Acquisitions, Ressource Based View, Agency Theory, Stewardship Theory, Institutional Theory, Credibility, Legitimacy, Value Creating Governance.

INTRODUCTION

The corporate governance debate has tended to focus on how boards could be made to serve better the interest of shareholders. This shareholder perspective, rooted in the agency theory tradition, considers that firm stockholders are the ultimate risk bearers, and should be considered, therefore, as the only principals (i.e. owners) for which managers (i.e. agents) are accountable. From its part, Stakeholder theory considers that the firm belong to all its stakeholders and managers should be accountable to its key employees, clients, suppliers, and the community in general. Since 1983, more than thirty American States have adopted what became commonly called the corporate constituency statutes or stakeholders status (Orts, 1992) that allow the board of directors to consider the interests of constituencies other than shareholders, including employees, suppliers, customers, creditors and the community in making-decision, facilitating therefore the birth of various anti-takeovers mechanisms (Springer, 1999; Allaire and Firsirotu, 2005; 2009). In Canada, although the CBCA considers under section 122, that directors should “*act honestly and in good faith for the best interests of the corporation*”, it seems that in practice and under the shareholder primacy model this duty means *acting in the interests of Shareholders* (Andrew Kitching Law and Government Division, 2008). Allaire and Firsirotu (2009: p 141) noted that: “*This position is surprising in view of the rulings of the Supreme Court of Canada. In two recent judgments, the Supreme Court clearly established that boards of directors have a responsibility to the company and its stakeholders, not solely to shareholders (Peoples Department Stores v. Wise, October 2004; BCE, Bell Canada, June 2008)*”.

However, the debate on whether management should maximize shareholders value or maximize those of the firm stakeholders, in addition to have confined

corporate governance to focus on the accountability aspects, has contributed to minimize the interest on investigating the board strategic contribution in the firm value creation processes, no matter which party will benefit from the economic value generated at the end of these processes.

Hence, agency theory emphasized the implications of the separation of ownership and control in modern organizations (Berle and Means, 1932) and was rather interested to find efficient mechanisms which could help to overcome the negative effects of managerial control over the firm resources, particularly, through the use of internal and external corporate governance mechanisms. Consequently, Board of directors, as an internal governance mechanism, is supposed to represent the principals and its main function consists, according to the agency theorists, in monitoring managers and preventing them from undertaking value destroying actions and self serving behaviour. In addition, the board of directors is supposed to play a disciplinary role through its ability to terminate managers' contracts and its authority to replace them when it's necessary.

Furthermore, agency theorists consider the board of directors as an information instrument designed to reduce information asymmetry and to mitigate agency costs, which provided the foundations for what has been called *fiduciary* corporate governance (Allaire and Firsirotu, 2003).

Accordingly, the *Fiduciary* model is consistent with the monitoring and disciplining role of the board of directors and its proponents consider directors' independence, along with the separation of the CEO and chairman functions and the management compensation as its cornerstones (Allaire and Firsirotu, 2003). The Sarbanes- Oxley Act passed in 2002 and its equivalent bills passed in Canada (Bill 198), along with the Saucier Report (2001) and the TSE (2001) guidelines of *good corporate governance practices*, were largely based on the fiduciary conception of corporate governance and its instrumental view of the board role, along with the overestimation of directors' independence and managerial compensation as the main attributes of good corporate governance.

However, the concept of directors' independence, underlying the fiduciary model, was not carefully defined neither by the agency theorists (Johnson et al, 1996) nor by the regulators, which contributed to the exacerbation of the information asymmetry problem, given that outsiders, in addition to their poor knowledge of firm businesses and activities, tend to become heavily dependent on management for internal and strategic information.

Indeed, defining *independence* as the absence of material relationship between the directors and the firm in which they serve, while could prevent conflict of interests and ensure objective and more diligent monitoring, it could not ensure that directors are competent and that they possess the required knowledge, expertise and information to contribute actively and positively in the firm strategic decision making (Baysinger and Hoskisson, 1990). Although, all the guidelines and the recent reports, such as the SCB (2003), outlined that board of directors is the firm ultimate decision taker, and is responsible for setting strategic orientation and ensuring its implementation, none had provided useful guidelines on how directors could be empowered and board processes enabled to fulfill this critical role.

As an alternative control mechanism on management, the free, unconstrained market for corporate control (what has been called *The Shareholders' Rights Governance*) is supposed to ensure that managerial incompetence or value destroying actions would quickly lead to a takeover of the company and the replacement of management and the board (Allaire and Firsirotu, 2003). However, the market for corporate control, being a last recourse mechanism (Fama and Jensen, 1983), may not necessarily impede managers' deviation from pursuing value creation objectives and will intervene only when value destruction becomes manifest. Furthermore, management entrenchment and anti-takeover provisions, rather prevalent throughout the corporate world, including in the United States, make it difficult for the market for corporate control to play its correcting role, let alone a preventive one (Allaire and Firsirotu, 2003).

The wave of LBO acquisitions during the 1980s was a direct application of the shareholders' rights principle. Hostile takeovers of companies by financial

operators -who claimed management and boards were mismanaging corporations, were failing to maximize free cash flows and were wasting company resources in unproductive activities- were the norm. This systematic aggression of corporations led to the enactment of laws to curb LBO operators in several key U.S. states.

Following the notorious scandals of the early 2000's, such as those of Enron, WorldCom and Tyco, among others, regulators strengthened the fiduciary role of the board of directors and provided new monitoring empowerments for directors. Although necessary, these new dispositions reinforced only the mechanisms by which agency costs could be reduced, but neglected how economic value was generated and how the board of directors could play a more dynamic role in the firm's value generating processes.

On the other hand, empirical evidence has reported mixed results on the impact of fiduciary attributes of corporate governance- such as board composition, equity based compensation, board size, debt level and ownership concentration- on firm performance.

Relying on the hypothesis that outside directors are more independent from management than insiders (Jensen and Meckling, 1976; Fama and Jensen, 1983), Board composition function and its effect on firm performance were extensively investigated under the agency perspective, particularly in the case of studies relying on the outsiders/insiders proportion as a proxy for board effectiveness. However, empirical evidence of the impact of board composition on governance effectiveness or firm performance is highly mixed and generally inconclusive (Daily, 1995; Johnson et al, 1996; Dalton et al, 1998). Thus, while Daily (1995) concluded that there is no systematic relationship between board composition and its ability to fulfill efficiently its service, resource and control functions, Johnson et al (1996) identified studies that reported (1) a positive relationship between the proportion of inside board members and firm performance (Vance, 1983; Cochran et al, 1985; Kesner, 1987), (2) a positive relationship between the proportion of outside board members and firm performance (Hill and Snell, 1988; Pearce and Zahra, 1992), and (3) a non significant relationship between the proportion of inside board members and

performance (Molz, 1988). Allaire and Firsirotu (2003) found, also, a non significant relationship (with a relatively negative tendency) between board composition and firm performance for Canadian firms.

Furthermore, in a recent Meta-Analytic review of the impact of board composition as a governance mechanism, Deutsch (2005) have identified three streams of research: (1) studies examining the relationship between board composition and firm general performance (Dalton et al, 1998; Finkelstein and Hambrick, 1996; Zahra and Pearce, 1989) reporting mixed and inconsistent evidence; (2) studies using meta-analytic reviews to assess the impact of board composition on firm financial performance (Dalton et al, 1998; Rhoades et al, 2000) concluding with weak and small positive relationships; (3) studies relying on the assumption that the accurate evaluation of the impact of board composition should be examined by considering discrete critical decisions, rather than financial performance, as dependent variables (Mallette and Fowler, 1992; Sundaramurthy, 1996) given that board monitoring, while may have a direct effect on firms' critical decisions, it has only an indirect one on firm financial performance. Evidence from the third stream is also inconclusive.

Indeed, and while Bhagat and Black (1999) reported that there is no clear evidence on the impact of board composition on firms' critical decisions, Deutsch (2005: pp 440-441) concluded that "*Whereas the former stream (i.e. the one linking board composition to firm performance*) has reached a dead end (Dalton et al., 1998), this study's results suggest that the latter stream (i.e. the one linking board composition to firms' critical decisions*) warrants further exploration. Specifically, systematic relationships were found between board composition and firms' critical decisions in which the underlying issues include CEO's compensation scheme, the level of firms' risk, and corporate control issues in which shareholders and managers' interests potentially diverge. The systematic relationships found, however, provide only little support to the predictions based on positivist agency theory. It is therefore hoped that the results presented here will stimulate new directions in research on the effect of outside directors' representation on corporate boards on firms' critical decisions*". (*not in the original text).

Nevertheless, all the studies reported above have used the proportion of outsiders as a proxy for board independence (i.e. effectiveness), discarding the fact that the theoretical positive effect expected from the presence on the board of a large majority constituted by outside members, is likely to be reversed by an exacerbated information asymmetry when these directors are lacking specific information, expertise and knowledge about the company and its businesses (Walsh and Seward, 1990; Allaire and Firsirotu, 2003; Van den Bergh and Levrau, 2004). Indeed, severe information asymmetries suffered by the so called *independent* directors will imply, therefore, a passive implication of the board in the firm decision making processes, in addition to an awkward accomplishment of its decision control role, as prescribed and expected by agency theory.

Consequently, the concept of independence, as defined by the current rules and as used in the previous research, should be reconsidered in order to avoid the potential counter effects that stem from boards composed by a majority of outsiders. Indeed, composite measures accounting for information asymmetries, along with material independence, power issues and board financial involvement, could capture better the real degree of board independence than the mere outsider/insider classification, generally used in corporate governance research.

As for equity based compensation, empirical evidence on the relationship between performance and equity ownership (i.e. Insider ownership) is also mixed. While Demsetz and Lehn (1985) and Loderer and Sheehan (1989) found no relationship between the level of executive equity ownership and firm performance, other researchers reported, at best, a weak positive, but instable association (Morck et al, 1988; McConnel and Servaes, 1990; Mehran, 1995; Loderer and Martin, 1997; Core and Larcker, 2002). Furthermore, several researchers identified a non-linear relationship between managerial ownership and firm performance (Morck et al, 1988; McConnell and Servaes, 1990; Hermalin and Weisbach, 1991) and argued that high managerial ownership could induce managers to exert insufficient effort, maximize private benefits and adopt entrenchment behaviour (Morck et al, 1988, Short and Keasey, 1999).

The management entrenchment hypothesis suggests, therefore, that managers with high stockholdings would seek to design control systems that enhance their private interests (Shleifer and Vishny, 1989; Edlin and Stiglitz, 1995; Bebchuk et al, 2004) and decrease (or neutralize) the effectiveness of the other governance mechanisms, including the shareholder participation in policy making processes and board monitoring ability (Weisbach, 1988; Dann and DeAngelo, 1988; Boeker, 1992; Denis et al, 1997).

Another governance attribute that captured a huge interest of agency theorists is board size. Indeed, while Yermack (1996) reported a negative relationship between board size and firm value and Eisenberg et al (1998) found a negative effect of board size on firm performance, Adams and Mehran (2003) reported a positive effect of board size on firm performance in the banking industry. In their frequently cited study, Hermalin and Weisbach (2003) stated that board size and firm value appear to be negatively correlated. However, board size could have both a positive and negative effects on firm performance. Indeed, while large boards could count on a larger pool of expertise, knowledge and experience provided by their members as well as on a wide range of perspectives and opinions on the firm strategic issues (Forbes and Milliken, 1999), they may also suffer from coordination and communication problems or group dynamic issues such as fractions and coalitions that could hamper board ability to act or to effectively monitor management (Judge and Zeithaml, 1992; Golden and Zajac, 2001; Van den Berghe and Levrau, 2004). Here again, the literature seems to show mixed and inconclusive direct effect of board size on firm performance or firm value.

In addition to the board of directors and executive compensation, agency theory prescribes several alternative mechanisms to achieve goal congruence between managers and shareholders, such as debt and dividends policies or ownership concentration, used simultaneously (or as substitutes) with (to failing) board monitoring and executive compensation (Agrawal and Knoeber, 1996). Indeed, Jensen et al (1992) found a negative relationship between management ownership, dividend and debt policies, and concluded that the causality was likely to run only from management ownership to dividend and debt policies' uses.

Consequently, dividend and debt mechanisms will not reduce agency costs when management ownership is important, indicating a substitution effect between the three mechanisms (Crutchley and Hansen, 1989). Furthermore, McConnell and Servaes (1995) assert that, depending on firm context, debt could have a positive or a negative effect on firm value, and that negative effects are particularly present in the case of companies evolving in environments with multiple growth opportunities. Moreover, Agrawal and Knoeber (1996) showed that, to be effective, the use of debt should be coupled with internal monitoring exerted through inside shareholders, or outside members of the Board.

For agency theory, nevertheless, only Institutional concentrated shareholding could constitute an efficient governance mechanism given that it may increase the takeover probability of the firm (Shivdasani, 1993), which would discipline managers and forces them to pursue shareholder interests (Fukuyama, 1995; Schulze et al, 2001). Indeed, family controlled firms are viewed by the agency theorists as inefficient and backdated structures that may hinder the efficiency of the takeover mechanism. In addition, Public-traded family firms incur, according to the agency theorists, higher cost of capital due to the premium paid to minority shareholders in order to compensate them for the expropriated private benefits that the controlling owners will, potentially, enjoy through their control rights (Shleifer and Vishny, 1997; La Porta et al, 1999).

On the bounce of the brief literature reviewed above, we deem that by considering boards as a strictly monitoring device and by fiercely promoting fiduciary features such as the presence of a majority of board outsiders, the use of equity based compensation or/and higher debt levels and the presence of concentrated institutional shareholding, the dominant agency perspective left out the interest on how the board could effectively and actively contribute to the firm's value creation. Furthermore, most of the studies based on agency theory, stewardship theory or resource dependence theory investigated the direct impact of board of directors on firm performance under normal circumstances, in which boards are not directly and significantly involved, and in which their contribution may not be considered as an

important direct determinant of firm performance (Kesner and Johnson, 1990; Deutsch, 2005).

We conclude therefore that it would be more fruitful to assess board impact on firm performance by using an identified circumstance or critical decision, such as M&A, in which the board is supposed to play a direct and significant role. Consequently, the ultimate aim of the present thesis is to provide some guidelines for corporate governance to help Boards in playing a more active role in the firm's value creation processes, superseding the monitoring and disciplining function rooted in a strictly fiduciary view of corporate governance.

Without contesting the importance of the monitoring function, we believe however that corporate governance should not consist only in reducing agency costs, as the agency theory's proponents suggest, but should also fulfill a resource allocation (O'sullivan, 2000) and a rent generating (Barney, 2001) or a value creating function (Allaire and Firsirotu, 2003).

The present study aims, therefore, to investigate how corporate governance should be extended in order for boards to play a more strategic role in the firm's value creation processes, rather than sticking to a monitoring and disciplining function rooted in the traditional agency perspective. Given that board of directors, while may have some direct effect on firms' critical decisions, such as acquisitions, and only an indirect effect on firm financial performance in normal circumstances (Deutsch, 2005), we propose to study the role of board of directors in the most sensitive area of Merger and Acquisition decisions to assess their contribution to firm performance. Our study of governance with respect to the M&A phenomenon is sensitive to the main frameworks proposed in the literature on governance, including the Agency theory (Jensen and Meckling, 1976), Stewardship theory (Donaldson, 1990), the Resource Dependence theory (Pfeffer and Salancik, 1978), the Resource Based View (Wernerfelt, 1984; Barney, 1991) and the Value Creating Perspective (Allaire and Firsirotu, 2003). Through logistic and OLS regressions, we shall assess which governance attributes, if any, may significantly discriminate between

successful and unsuccessful acquirers, as well as which ones, if any, have a significant impact on post- acquisition performance.

Thus, we believe that by focusing on a single strategic event, that is, acquisition decisions, this dissertation will make a significant contribution to the understanding of corporate governance and its impact on firm performance.

CHAPTER I

GENERAL PROBLEM AND RESEARCH QUESTIONS

1.1 General research questions and objectives

Corporate governance has been extensively investigated in the finance field, and although some strategy and organizational behaviour scholars have investigated the role of the board of directors, Agency theory remains, by far, the most dominant perspective in the corporate governance research. Despite of its strong and well articulated theoretical framework in outlining the governance problem that stem from the separation of ownership and control (Berle and Means, 1932, Jensen and Meckling, 1976), agency theory has provided a limited one-dimensional, simplistic and instrumental conception of a complex, multifaceted phenomenon (Walsh and Kosnik, 1993; Finkelstein and d'Aveni, 1994; Lane et al, 1998). Thereby, the board of directors' limited monitoring and fiduciary role, as well as the ill defined core concepts that underlie it (e.g. board independence), or other mechanisms (e.g. performance based compensation) that complement it, while supposed to address the corporate governance problem, have contributed, rather, to the notorious and awkward corporate governance failures witnessed in the dawn of the current decade.

Therefore, several authors became to argue that to overcome its shortcomings, Agency theory should be complemented by other theoretical perspectives in order to capture the real complexity of organizations and to come out with more realistic conceptions for solving governance problems (Eisenhardt, 1989;

Johnson et al, 1993). In addition, the board of directors' strategy role, which the agency theory vaguely considers and highly understates (Zahra and Pearce, 1989; McNulty and Pettigrew, 1999; Hill, 1995; Stiles and Taylor, 2001), should retain more attention in order to understand how it could contribute in solving the agency problem through board activeness in shaping and implementing firm strategies.

Furthermore, corporate governance should not consist only in reducing agency costs, as its proponents suggest, but should also fulfill a resource allocation (O'sullivan, 2000), a rent generating function (Barney, 2001) and play a value creating role (Allaire and Firsirotu, 2003, 2004). Indeed, being the most important component of any corporate governance system, Board of directors should play a more active and dynamic role in the resource allocation decisions and firm strategy making processes (McNulty and Pettigrew, 1999), and more importantly, should become a source of competitive advantage, rather than continuing to be considered as a mere formal fiduciary device.

In order to extend board roles and functions, a multi-theoretical approach of corporate governance is more relevant than one-dimensional perspectives. Thus, Stewardship theory complements the agency view by outlining the importance of simultaneously using control and collaboration (Donaldson, 1990; Demb and Neubauer, 1992; Sundaramurthy and Lewis, 2003) in order to not fall in reinforcing cycles that may make them dysfunctional. Indeed, control oriented governance could lead to board and management polarization, restrictions on information flows, myopic behaviour that impede risk taking and suppress organisational learning, clan fights and impression management. On the other hand, collaboration oriented governance may lead to groupthink (Janis, 1982), overconfidence, environmental change discounting, complacency, entrenchment behaviour, consensus seeking and/or higher commitment toward irrelevant and suboptimal strategies (Sundaramurthy and Lewis, 2003).

The Resource dependence theory (Pfeffer and Salancik, 1978), on the other hand, highlights the notion of resources that directors bring to the firm, and discusses how they may contribute to reduce firm uncertainty by allowing it to have

access to scarce and critical resources, such as, information, technology and financial capital. In addition to their role in reducing firm uncertainty, directors are supposed to provide the organization with other valuable resources such as skills, specialized and general expertise, strategic and functional advice, working knowledge and alternative points of view (Pfeffer and Slancik, 1978; Mizruchi, 1983; Hillman et al, 2000; Baysinger and Zardkoohi, 1986; Johnson et al, 1996). However, the Resource dependence theory omitted to explain how resources brought by directors are used and linked to firm governance processes in order to enhance firm performance.

Moreover, the Resource Based View (RBV) provides an additional insight on how board of directors could become a source of competitive advantage, and complements the resource dependence theory through its interest on the processes by which resources, including those provided by directors, are combined with other internal firm resources to shape specific, and difficult to imitate capabilities. However, and while the RBV theorists have been interested in studying the role of resources, competences and capabilities in general, as well as their role in creating and sustaining firm competitive advantage, a specific application of these concepts in corporate governance remains highly missing (Barney, 2003), excepting the study by Castanias and Helfat (2001), which consider essentially managerial resources and capabilities, while it vaguely discuss the board of directors' capabilities. Another study by Horner (2006), in which he tried to investigate how governance resources and capabilities could contribute to firm competitive advantage and acquisition performance, showed no correlation between acquirer's board average experience and acquisition performance. The present thesis aims to add a meaningful contribution to this line of research by providing an additional insight in the strategy field through the conceptualization of corporate governance in terms of Directors' credibility and legitimacy (Allaire and Firsirotu, 2004; 2003; 2009) and by considering that efficient strategy processes and dialogue (Allaire and Firsirotu, 2003, 2004; 2009) based on relevant governance resources and capabilities could significantly contribute in shaping firm's competitive advantage.

From another point of view, the Socio-cognitive branch of the institutional theory shows us how directors' social interactions could be beneficial for a focal firm, especially, when it appoints on the board individuals exercising executive functions on other firms, or are members of other companies' board of directors facing similar strategic contingencies (i.e. strategic context). These appointments could provide the focal firm with relevant strategic information, expertise and knowledge which contribute, therefore, to enhance firm corporate governance processes, board involvement and firm strategy making effectiveness (Carpenter and Westphal, 2001).

The Value Creating Governance perspective proposed by Allaire and Firsirotu (2003, 2005, 2008, 2009) provides, on the other hand, an interesting general framework with four pillars consisting in (1) Board legitimacy and credibility; (2) Strategy process and dialogue; (3) The quality of financial and strategic information and (4) A calibrated compensation and incentive system. While all the pillars are important for governance to create value, board *legitimacy* and *credibility* that constitute the first pillar, are considered as *sine qua non* antecedents of any effective governance system (Allaire and Firsirotu, 2003; 2004; 2009).

As for Legitimacy, and according to Allaire and Firsirotu (2009, p.251) "*A board of directors is legitimate when most of its members are independent from management and have been selected or elected by those who have a stake in the company*". According to Allaire (2008, pp 10-11), board legitimacy flows from two sources:

1. *Legitimacy based on independence from management as well as on a nomination and election process that ensures adequate representation for the organization's stakeholders, and in the case of exchange-listed companies, for its shareholders. These board members are formally independent from management and from all significant shareholders, if any. Stakeholders, in the case of public organizations, and shareholders, in the case of exchange-listed companies, must believe that those appointed or elected to the board represent well their interests.*

2. *Legitimacy based on important, committed shareholding. Significant shareholders actively engaged in the governance of the company, are bearers of great legitimacy. It is a tenet of our economic system that shareholders with large economic interests in a company will play an important role in their governance, if they so wish. Who, under most circumstances, has more legitimacy to assert his or her authority over management than a shareholder with large stakes in the company?*

Credibility refers to board members' expertise and knowledge related to firm industries, businesses and activities. According to Allaire and Firsirotu (2009), "*credibility is the real challenge for the publicly listed corporation. Credibility is the joint product of competence and trustworthiness*"..."A director's credibility results from his/her expertise and relevant experience as well as the trust he/she inspires. Credibility cannot be measured. It is virtually impossible for an outside observer to assess a board members' credibility, yet this quality is glaringly obvious to anyone sitting on a board. The unfortunate fact that many board members lacks credibility explains the weak performance and the little added value of governance in too many organizations", they conclude however that "while it is legitimacy that gives a board the right and authority to impose its will on management, it is credibility that makes a board effective and value-creating" (2009, pp. 253-254).

Thus, *Legitimacy* and *Credibility* are better proxies for board independence than the outsiders/insiders measure used in the literature. Furthermore, being constructs that could be measured in a multidimensional way, rather than single and one-dimensional variables, Board *Legitimacy* and *Credibility* will capture better the complexity of the directors' *independence* concept, and will allow for a better understanding of how legitimate and credible board of directors could contribute to create value by actively participating in the firm resource allocation processes.

Strategy process and dialogue constitute the second pillar of the Value Creating perspective (Allaire and Firsirotu, 2003; 2004; 2009) and through which directors should, as principals, review and approve the strategic planning process,

include in that process an early discussion with management of firm's strategic orientation before the strategic plan is finalized and ensure that sufficient time is allocated to review and discuss firm's strategic issues. While legitimate and credible directors can give full effectiveness to this pillar (Allaire and Firsirotu, 2003; 2004, 2009) we believe that the existence of relevant governance resources and governance strategic capabilities will further improve this strategy process and dialogue.

The quality of financial and strategic information is the third pillar of the Value Creating perspective and directors should ensure the reliability and validity of financial information, show a well understanding of the significant accounting judgement and ensure access to reliable and independent information on competitive position, on client assessment of company's products and services and on employee's perceptions of the company. Under this pillar, directors should also review capital investments, budgets and specific proposals (Allaire and Firsirotu, 2003; 2004; 2009). Here again the effectiveness of this pillar will be given by credible and legitimate directors.

A calibrated Compensation and Incentive system constitute the fourth and last pillar of the Value Creating Perspective by which the board should set compensation principles and practices that are optimal for the company, link management incentives to genuine value-creation indicators and ensure a balance between short and long-term economic performance (Allaire and Firsirotu, 2003; 2004; 2009). As in the case of the second pillar, the third and fourth pillars could be further improved if the firm possesses relevant governance resources and monitoring capabilities.

In the light of this brief discussion, the objectives of the present thesis is to assess board impact on firm performance, by trying to conceptualize the four pillars of the Value Creating Perspective through a multi-theoretical framework, within a decisional context in which the board of directors is directly involved (i.e. Acquisition context) and through a methodological approach that compare the corporate governance attributes of successful and unsuccessful acquirers to identify which

governance attributes could be considered as governance resources or capabilities that may contribute to the firm competitive advantage. In relation to these objectives, the formal research questions addressed in the present thesis are as follow:

Research question 1 (Q1):

Q.1.1: Is Board Legitimacy related to acquisitions' success?

Q 1.2: If Board Legitimacy is related to acquisitions' success, how does it affect post acquisition- economic performance?

Research question 2 (Q2):

Q 2.1: Is Board Credibility related to acquisitions' success?

Q 2.2: If Board Credibility is related to acquisitions' success, how then does it affect post acquisition- economic performance?

Research question 3 (Q3):

Q3.1: Are Board monitoring capabilities related to acquisitions' success?

Q3.2: If Board monitoring capabilities are related to acquisitions' success, how then do they affect post acquisition economic performance?

Research question 4 (Q4):

Q 4.1: Are Board strategic capabilities related to acquisitions' success?

Q 4.2: If Board strategic capabilities are related to acquisitions' success, how then do they affect post acquisition economic performance?

Research question 5 (Q5):

What are the relative impacts of board monitoring and strategic capabilities on acquisitions' success?

In order to undertake a finer grained analysis of the potential contribution of board and governance capabilities in creating value, the present study uses the context of M&A to assess the acquirer's board of directors' impact on its post-

acquisition performance. Indeed, the M&A context allow for assessing board of directors contribution to a specific aspect of performance, that of post-acquisition, rather than general financial performance achieved under normal circumstances. The motivations that led to the choice of M&A as a context for the present thesis are presented and discussed in the next section.

1.1.1 The rationale behind choosing M&A as a context to assess the link between Board of directors and firm performance

Choosing the M&A decisions as the context for the present study was motivated by four reasons. First, boards of directors are legally required to participate actively in these highly strategic decisions (Bacon, 1985; Lorsh and MacIver, 1989; Byrd and Hickman, 1992; Avery et al., 1998; Hayward & Hambrick, 1997; Wright et al. 2002; Thompson and Thomas, 2004). In addition, acquisitions are discretionary managerial decisions and present a situation in which agency problems become manifest (Jensen, 1986; Allen, 1981; Baysinger and Hoskisson, 1990, Cotter and Zenner, 1994; Hayward and Hambrick, 1997; Anderson et al, 2004).

Second, acquisitions are important resource allocation decisions (Williamson, 1975; Sirower, 1997) and constitute means to achieve operational efficiencies, strategic fit and economic growth (Sudarsanam, 2003; Gaughan, 2005). On the other hand, O'Sullivan (2000) defined corporate governance as a system that "*shapes who makes investment decisions in corporation, what type of investment they make and how returns from investment are distributed*", while Daily et al, (2003) defined governance as "*the determination of the broad uses to which organizational resources will be deployed and the resolution of conflicts between a myriad participants in organization*". Furthermore, Burgelman (1983) defines strategy as the concept that "*provides a more or less shared frame of reference for the strategic actors in the organization, and provides the basis for corporate objective setting in terms of its business portfolio and resource allocation*", and acquisitions are generally considered as nonroutine, resource allocation decisions that affect the long-term performance of the organization (Judge and Zeithaml, 1992), while Shmidt and Brauer (2006) argued that monitoring the resource allocation decisions was the

main concern of corporate governance. Finally, intended or unintended firm strategy tend to be generally materialized through resource allocation decisions (Mintzberg and Waters, 1985; Noda and Bower, 1996), where Board of directors, in addition to the determination of the firm strategic orientations, should ensure that the executed strategy, manifested through firm resource allocation decisions, is consistent with the firm announced strategy.

M&A are, therefore, among the most important resource allocation decisions involving corporate governance, strategic, organizational, economic and financial issues and are, consequently, salient contexts to be used in order to assess how board control and strategy making capabilities could affect firm performance measured as an outcome of a specific event, and not as a general financial outcome realized under normal circumstances (Hermalin and Weisbach, 2003; Kesner and Johnson, 1990).

Third, the M&A literature shows that, in general, acquisitions failed to create value for the acquirers and many authors suggested that this letdown could have been the result of the corporate governance failure (Weston et al, 1998; Sudarsanam, 2000; Gaughan, 2005). Indeed, Sudarsanam (2000) argued that *"the systematic nature of the evidence of failure of M&A suggests that the source of the problem may also be systematic if not systemicand that poor corporate governance in the acquirer firms may have led to inadequate monitoring of the various stages of the acquisition process, such as pre-acquisition evaluation of the target, deal restructuring and negotiation, and post-acquisition integration"* and concluded that *"the causes of failure in acquisitions may, thus, be traced to the causes of failure of the corporate governance system"*. In the same vein, Gaughan (2005: 211) noted that *"The discussion of corporate governance has focused more on the accounting frauds and less on the need to more closely monitor the M&A in which companies may engage. However, this is an important governance function, and increased focus in this area is needed"* and that *"Many of these deals (which were the product of poor corporate strategy) could have been prevented by better corporate governance and more diligent directors"*.

Fourth, M&A activities are important economic activities all over the world, and Canada is far from being an exception. Indeed, worldwide M&A activities doubled between 2002 and 2006 to reach the peak of \$3 trillion, and Canadian M&A activity reached an unprecedented volume of \$294 billion in 2007 (Figure 1.1).

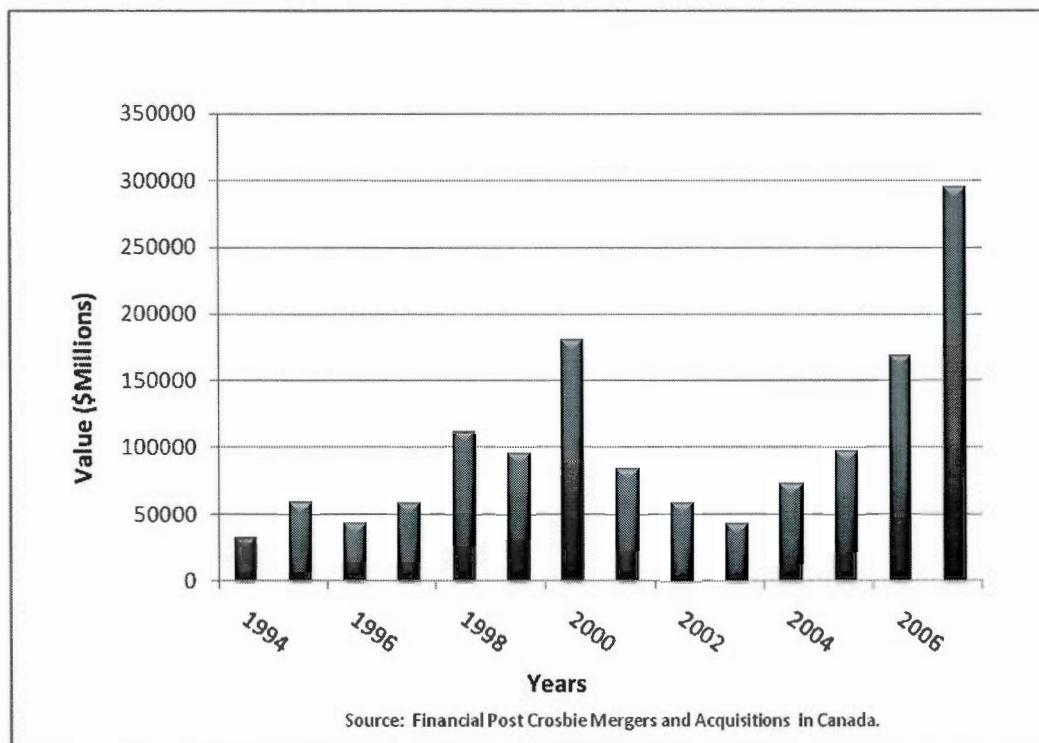


Figure 1.1 M&A Activity in Canada (1994-2007)

Among the 1379 transactions performed in 2007 (Figure 1.2) Canadian firms performed 349 cross border deals valued at \$68,2 billion, while foreigners performed 129 deals valued at \$169,8 billion (Crosbie and Co, 2008). Thus, some 900 transactions were domestic and involved only Canadian firms. Furthermore, Canadian acquisitions have grown at an average rate (CAGR) of 59,4% between 2004 and 2007, which could be explained by a healthy economy, readily available and low priced financing, high share prices, strong profits and balance sheets, and the growth of buyouts and hedge funds.



Figure 1.2 Number of M&A announcements in Canada (1994-2007)

Taken together, we believe that these four motives demonstrate the soundness of using the M&A decision as a context to investigate the link between governance capabilities, and particularly the impact of board of directors' control and strategic capabilities on firm performance.

CHAPTER II

CORPORATE GOVERNANCE AND THE BOARD OF DIRECTORS: LITERATURE REVIEW AND THEORETICAL BACKGROUND

Corporate governance is a multifaceted and complex phenomenon involving resources, processes, conflicting interests and economic value creation. However, much of the recent interest on corporate governance has focused on its fiduciary aspects, largely derived from the agency perspective that has dominated the field for more than three decades. Although other theories began to show interest on corporate governance, the fragmented, and usually opposed perspectives on which they draw, yielded contradictory and mixed results. Many scholars became to question the dominance of agency theory in corporate governance and called for using a multi-theoretical perspective, rather than one-dimensional approaches to investigate corporate governance issues (Eisenhardt, 1989; Hendry and Kiel, 2004; Hoskisson et al, 2002; Johnson et al, 1993).

In line with these recent calls, the objective of the present chapter is to review the literature on corporate governance from a multi-theoretical perspective, using the agency theory, stewardship theory, managerial hegemony theory, resource dependence theory, institutional theory, the resource based view and the governance value creating perspective. In the next sections, we will discuss the implications of each theory for corporate governance and board of directors' role and highlight the issues, strengths and limitations of each perspective.

2.1 The agency theory perspective

Traditionally, corporate governance issues were the province of the agency theory and both its normative and positive streams were interested in studying the

relationships between principals and agents. In this section, we will first review the main propositions of the agency perspective, its roots and its implications for corporate governance in general, and subsequently, emphasize its main assumptions, propositions and limitations, specifically, those in regard to the board of directors' roles and functions.

Agency relations exist in virtually every situation in which one party, called the *Principal* engages another party, called the *Agent*, to execute in return of a certain utility, some services or tasks that involve the delegation of some decision making authority (Jensen and Meckling, 1976; Arrow, 1985; Pratt and Zeckhauser, 1985). Agency relations become problematic in situations where Information asymmetry, along with diverging interests between the principal and the agent, tend to be present in a significant way (Pratt and Zeckhauser, 1985). These situations may lead to deviant managerial behaviour caused by the presence of moral hazard and/or adverse selection problems. Moral hazard implies the dissimulation, by the agent, of some actions or behaviour that maximize his own interest at the detriment of the principal, while adverse selection leads to the dissimulation of some critical information during the contract settlement or later during its execution (Arrow, 1985).

In their seminal work, Berle and Means (1932) pointed out that the separation between ownership and control, as a result of the scattered nature of the shareholding structure, has led to the concentration of power on the hands of a small class of professional managers that were not necessarily acting in the best interest of the firm shareholders. Several perspectives took roots on this observation, and different theoretical proposals were developed in order to explain and solve agency issues. However, all these propositions share approximately the same central preoccupation, that of how to ensure, under the conditions of utility maximization assumptions, that agents (i.e. management in the case of the modern corporation) will act in the best interests of their principals (i.e. shareholders or owner's of the firm capital).

According to Donaldson (1990), management theory was more interested in studying organizations as systems with purposes, structures and outputs, while

economics was interested in analyzing individual conscious actions. On the other hand, Organizational economics, from which agency theory derive, along with Transaction costs economics (Williamson, 1975), reconcile the management and economic perspectives by providing tools for analyzing organizational systems, through the rational and conscious actions of their individual actors.

Agency relations come generally within the scope of microeconomics finance, and refer to contractual relations between principals and agents. Coase (1937) was the first to raise the idea that market transactions were not costless, and that firms exist because they contribute to reduce these costs through internal contractual structures (i.e. organizations), considered as substitutes for the costly market transactions. Consequently, Coase's perspective considers the entrepreneur as the central party in managing and directing all the transactions occurring within or involving the firm, having therefore the ability to negotiate separately with the transacting parties, in addition to the right of selling or disbanding the organization.

However, the rise of modern public corporations -with highly dispersed shareholders controlled by professional managers instead of entrepreneurs, replacing them as the central party in directing organizational transactions and negotiating with the other contracting parties- has caused a transition from an entrepreneurial era to a managerial one (Chandler, 1962, 1977). Hence, managers in public corporations became to perform the duties of Coase's entrepreneur, but without being the owners or the residual claimants of the firm.

In an underlying effort to extend and refine Coase's proposition, Alchian and Demsetz (1972) argued that given the voluntary nature of the contractual relations, firm activities could not be governed by hierarchical or authoritative structures and should be considered, rather, from a team production perspective, particularly, when firms are viewed as a bundle of contracts between different input parties holding a property right on some resources they bring along in order to participate in the cooperative effort. Pushing forward their analysis, Alchian and Demsetz (1972) noted that potential shirking behaviour of some participants during this cooperative effort may lead to minimize the production output, and ultimately, to reduce the income of

all the parties involved in this joint effort. They assert, therefore, that in order to contain this potential shirking and maximize production output, the contracting parties should readily agree to choose among them a monitoring one. However, the designated monitoring party should have sufficient inducement- essentially the residual right on the net income following from the cooperative effort- to ensure that all the participants are fulfilling their duties in an efficient way. In an entrepreneurial firm, this role is assumed by the entrepreneur owner, however, in large owned corporations, entrepreneur-owners are replaced by professional managers appointed by scattered shareholders (i.e. residual claimants) who assume the residual risks, but who have no incentive in assuming the control role. Therefore, managers are appointed by these residual claimants and are, subsequently, vested with the duty of directing and monitoring the production process, on behalf of the capital owners, in a way that maximizes the overall value of the firm, and consequently maximizes the value of all the other parties.

Contesting the team production concept, Jensen and Meckling (1976) argued that the joint input perspective used by Alchian and Demsetz (1972) was narrow and that agency relations could be extended to all the other contracting parties such as suppliers, customers, and creditors. They questioned also the concepts of fiat and authority proposed by Coase, and suggested that since the firm was a nexus of voluntary contracts, monitoring devices are more efficient than any other authoritative mechanisms in preventing opportunistic behaviour. Viewed from this perspective, organizations are the outcome of contractual relations between conflicting individual interests expressed through a complex equilibrium process, meaning that organizational behaviour is similar to market behaviour and should be considered, therefore, as an outcome of continually renegotiated sets of contracts.

Although they have extended the contracting concept to all the parties involved in firm activities, Jensen and Meckling (1976) consider the contracts between shareholders and corporate managers as the most important ones, mostly, because of the significant agency costs they're supposed to generate. However, the emphasis on shareholders as the *Principal* is not based on the assumption of being the owners of the firm, but rather, on the residual risk they're supposed to assume, in

addition to the agency costs stemming from self maximizing managers seeking to appropriate a large amount of corporate resources in the form of perquisites or willing to concede less efforts to create value for the firm. These agency costs are likely to increase when firm equity shifts from owner managers to outside investors, leading ultimately, to the separation of property and control as initially pointed out by Bearle and Means (1932). Put other way, agency costs result from vesting any party, other than the residual claimant, with ultimate decision making authority, and are essentially attributable to: (1) the effort of monitoring engaged by the principal to oversee his interests; (2) the bonding costs caused by some incentives consented to the agent in order to use firm resources in the best interests of the principal; and to (3) the principal's residual loss following the divergence resulting from agent's decisions in comparison to the optimal decisions that would maximize the principal's interests (Jensen and Meckling, 1976). Additional agency costs may result from other sources such as power seeking by managers, managerial risk aversion and the existence of free cash flow (Denis, 2001; Jensen, 1986).

However, highly dispersed ownership structures, while prevalent in the US and the UK, do not constitute the sole form of modern corporations and the governance issues related to widely held corporations are not necessarily the same as those faced by firms in Canada and Europe, where these structures are more concentrated and usually controlled by families, investment funds, governments or industrial groups (La Porta et al, 1999; Dyck and Zingales, 2004; Ben-Amar and André, 2006). Indeed, the firm's ownership structure affects the nature of governance problems by shifting the agency problem from the management-shareholders conflicts to minority-controlling shareholders concerns (Claessens, 2006).

In a survey conducted by Gadhoum (2006), the author reported that families control 56,17 % of Canadian firms at the 10% cut point compared to 20% in the U.S and 54,24% in Western Europe. Individuals and families control some 23% of the 253 listed firms in the S&P/TSX index at the 10% cut-off rule (Allaire, 2008). Furthermore, Gadhoum (2006) analyzed the ownership of some 1120 Canadian firms and came to the conclusion that *"In Canada, widely held firms are the*

exception rather than the rule. Moreover, families are the most pronounced controlling shareholders. These results suggest that the Berle and Means view of the widely held corporation as the foremost ownership does not hold in Canada" (p. 187).

Yet, firm ownership tends to play an important role in the firm governance systems, where differences in ownership structures lead to significant variations in what should constitute *efficient* corporate governance arrangements. Thus, and while family controlled firms are viewed by agency theorists, as inefficient and backward structures that may hinder the efficiency of the takeover mechanism, Institutional concentrated shareholding structures are considered by the agency perspective as likely to increase firm takeover probability (Shivdasani, 1993), which constitute a potentially disciplining governance mechanism that forces management to pursue shareholders interests (Fama and Jensen, 1983; Fukuyama, 1995; Schulze et al, 2001). However, other authors state that family control may enhance firm value under certain conditions (McConaughy et al, 1998; 2001; Anderson and Reeb, 2003; Villalonga and Amit, 2006), especially when the founder serves as a CEO or acts as a chairman with a hired CEO (Villalonga and Amit, 2006). We will discuss, in subsection 2.1.2.3, the role and the impact of firm ownership on its governance and how the family owned structure may, in the specific case of Canada, enhance firm corporate governance and contribute to create sustainable economic value.

2.1.1 Significance and implications of the agency problem: main governance mechanisms and evidence from previous research

Following the fundamental propositions and assumptions of the agency perspective (e.g. information asymmetry, diverging interests, agents' opportunistic behaviour and the agency costs that these situations may generate), a huge amount of empirical research was produced in order to evaluate the subsequent impacts of these agency problems on governance issues, firm performance and organizational behaviour.

In her widely quoted study, Eisenhardt (1989) identified two broad streams of research: the positivist and the principal-agent perspectives. While these two currents are somewhat different, they tend to share the same fundamental assumptions about individuals' motivations, organizational behaviour, and the nature or use of information systems. Indeed, while the principal-agent perspective is a general theory and its concepts are applied in virtually every agency relationships, the positivist stream is primarily concerned with conflicting owner-managers relations in large public corporations, constituting the stream from which the major part of corporate governance research was produced. Indeed, issues concerned with internal mechanisms (such as board of directors and other information systems, compensation and other outcome based contracts) or external mechanisms (such as capital, labour, and competitive markets) supposed to circumscribe the opportunism of agents, were largely proposed and tested under the positivist perspective. In the following subsections, we will review and discuss some of these important issues, particularly, those in relation with internal and external mechanisms used by the principals to circumvent agency problems and their corresponding costs. However, a particular attention will be given to the board of directors' role and function, which under the agency perspective, is considered as an internal mechanism, serving essentially to prevent and reduce shareholders' residual losses. Furthermore, and given its weight within the set of prescriptions proposed by the agency theorists, we will also discuss in some details the issue of managers' compensation.

2.1.2 Internal mechanisms

From the agency perspective, the principal-agent problem could be solved by (1) an efficient monitoring system ensuring that the decisions and behaviour of executives are consistent with the principals' interests; and/or by (2) an incentive system that induces the agent to maximize what the principal considers as an important outcome, such as, firm profitability (Tosi et al, 2000). Thus, efficient monitoring results from the appointment of an expert board of directors entitled with the responsibility of preserving the shareholders' interests through the ratification and the monitoring of important decisions made by the agents.

Board of directors, as the primary internal control mechanism, plays also a disciplining role through its ability to dismiss and reward management (Fama and Jensen, 1983). However, incentive outcome based contracts are considered by agency theorists as a "second best solution" to the monitoring system, mainly, because it transfers some risks to the agent (considered as *risk averse*), and should, therefore, be used only in the absence of good information about the agent activities or behaviour (Tosi et al, 2000, Eisenhardt, 1989). Other internal mechanisms are Insider shareholding, outside representation on the board, debt financing, dividend decisions (Agrawal and Knoeber, 1996; Jensen et al, 1992) and mutual or peer monitoring (Fama, 1980).

2.1.2.1 Board of directors as a control instrument

According to the positivist stream of the agency theory, boards should primarily play a control role in the firm decision making process (Johnson et al, 1996). In the same vein, Fama and Jensen (1983) consider the decision process in terms of a system formed by mainly two components: (1) The decision management component, consisting in the *initiation* phase where proposals for resource allocation and utilization are generated, and followed by the *implementation* phase during which ratified decisions should be executed and translated in real actions; (2) The decision control component, referring to the *ratification* of the decisions initiatives to be implemented and to the *monitoring* of these decisions through measuring their output performance and through the determination of the agents' reward mechanisms associated with it.

However, and given that managers do not bear the substantial risk associated with their decisions, effective control procedures should be instituted. Organisational rules (i.e. accounting and budgeting systems), mutual monitoring (i.e. internal agent market used by managers to enhance their human capital) and boards of directors, vested with the authority to exercise an ultimate control over the management (by holding the authority to ratify firm decisions and to cease managers' contracts), are among the most important components of the firm control systems. Accordingly, management should initiate and implement decisions, while

the board of directors should ratify these decisions and ensure that their implementation is in line with the interests of the principals.

Thus, under the general objective of the agency theory (that of preventing and reducing agency costs), board of directors' role consists primarily in checking self-serving managers and aligning, through incentives or coercive measures (firing and replacing managers), the interests of top management along with those of the firm shareholders.

Eisenhardt (1989) considers board of directors as an information device, and according to her, boards are substitutes for complex and costly incentive based compensation contracts, particularly, when they have the capacity to provide richer information through frequent board meetings, subcommittees, board members tenure, managerial and industry experience, and adequate representation of specific ownership groups. Put otherwise, board of directors is considered as an independent variable- along with risk attitude of the principal and the agent as well as the degree of outcome uncertainty – that serve to predict whether a firm should adopt behaviour or outcome based contracts to align the agent and the principal interests (Eisenhardt, 1989).

According to the agency perspective, boards will exert more efficiently their decision control role and fulfill better their informational function if they're composed by a majority of outside decision control experts willing to put their reputation at stake (Fama and Jensen, 1983). Thus, the few insiders to be appointed to the board are there for their specific knowledge of the firm, and for their valuable contribution in informing the board about the decision initiatives and performance of other managers, essentially, through mutual monitoring systems. Insiders are supposed, therefore, to reduce information asymmetries between outside board members and the incumbent managers (Fama and Jensen, 1983; Baysinger and Hoskisson, 1990). Conversely, Non Executive Directors should perform all the decisions that involve severe agency problems between shareholders and managers, particularly, the compensation and the replacement of top managers (Fama and Jensen, 1983). It is worth to note here that, even if the agency theorists recognized vaguely the

service task that outside board members could perform by providing advice to top managers on important strategic decisions (Zahra and Pearce, 1989; McNulty and Pettigrew, 1999), it remains, however, a secondary aspect of board responsibility. Indeed, board of directors are supposed to focus more on how to control management self serving behaviour and how to reduce agency costs, than on how to use directors' expertise, knowledge and cognitive resources to enhance comprehension, creativity and coherence of firm decisions (Rindova, 1999). According to this view, the control role performed by the board contributes to shape the strategic direction of the firm by imposing constraints on management (Stiles and Taylor, 2001). We will discuss, further away in the present chapter, the importance and implications of the Board service and resources under the assumptions of the resource dependence and the resource based view theories reviewed, respectively, in sections 2.4 and 2.6.

Moreover, empirical findings on the control role to be performed by directors, under the assumptions of agency theory, are highly inconsistent and provide no clear evidence on the ability of outside dominated board, used as a proxy for board independence, to effectively monitor the CEO and other top management (Daily, 1995; Johnson et al; 1996). The Independence of directors with regard to the CEO constitutes, however, the corner stone of the fiduciary control role that board members should fulfill in order to achieve monitoring effectiveness (Pearce and Zahra, 1991; 1992; Lipton and Lorsch, 1992).

Directors' independence is generally assessed by examining the existence or not of a material relationship between the director and the company in which he serves as a board member. This material relationship may include any commercial, industrial, banking, accounting, legal, consulting, charitable or familial relationships (NYSE, 2004). In addition, a director is not considered as independent if he (she) or an immediate member of his (her) family:

- *Has received, during the period of last three years, more than 100 000\$ per year as a direct compensation other than director and committee fees and pension or other deferred compensation not based on a continued service.*
- *Was affiliated or employed by a firm former internal or external auditor who provided audit services during the last three years;*
- *Was employed, during the last three years period, as an executive officer of another company where any of the focal firm's present executives serves on that company's compensation committee;*
- *Was employed, during the last three year period, by a company that accounts for 2% or 1 million\$ (whichever is greater) of the focal firm's consolidated gross revenues, or by a company in which the focal firm's gross revenue accounts for 2% or 1 million\$ of that company's consolidated gross revenue.*

In Canada, the TSX (2006) standards in relation with directors' independence are based on the same general criteria as those adopted by the New York Stock Exchange (NYSE) Authorities. The main difference between the TSX and the NYSE requirements consists in the amount of 75 000\$, within a period of one year, for the TSX listed companies, instead of 100 000\$, within three years, for the NYSE listed firms. Also, the last NYSE rule -considering a director as not independent if he (she), or a direct member of his (her) family, is employed by a firm that accounts for 2% and 1 million\$ of the focal firm's gross revenue- is not required as an independence criteria under the TSX standards.

Previous studies, relying on the mere separation between outside and inside directors as a proxy for board independence, provided mixed evidence on its effect on firm performance. In their extensive review of board literature, Johnson et al (1996) identified studies that reported (1) a positive relationship between the proportion of inside board members and firm performance (Vance, 1983; Cochran et al, 1985; Kesner, 1987), (2) a positive relationship between the proportion of outside board members and firm performance (Hill and Snell, 1988; Pearce and Zahra, 1992), and (3) a non significant relationship between the proportion of inside board members and performance (Molz, 1988). Allaire and Firsirotu (2003) found, also, a non significant relationship (with a relatively negative tendency) between board composition and firm performance.

These mixed results show that the independence concept, based solely on the *material relationship rule* is not, by itself, a sufficient condition for board effectiveness. Furthermore, Beatty and Zajac (1994) found a negative association between the proportion of outside directors and firm performance, while Bhagat and Black (1997) found no significant evidence on the effect of the proportion of outside directors on firm performance. Notwithstanding, the theoretical positive effect expected from the presence on the board of a large majority constituted by *materially independent* members, is likely to be reversed by an exacerbated information asymmetry when these directors are lacking specific information, expertise and knowledge about the company and its businesses (Walsh and Seward, 1990; Allaire and Firsirotu, 2003). Severe information asymmetries suffered by the so called *independent* directors will imply, therefore, a passive implication of the board in the firm decision making processes, in addition to an awkward accomplishment of its decision control role, as prescribed and expected by agency theory. Consequently, the concept of independence, as defined by the current rules, should be reconsidered in order to avoid the potential counter effects that stem from boards composed by a majority of outsiders. Indeed, composite measures accounting for information asymmetries, along with material independence, power issues and board financial involvement, could capture better the real degree of board independence than the mere outsider/insider classification, generally used in corporate governance research. In this regard, the Value Creating Governance perspective, discussed in section 3.6 is highly relevant, particularly, through the concepts of board *Legitimacy* and *Credibility*.

2.1.2.2 Compensation and insider ownership mechanisms: interests' alignment and entrenchment behaviour

Executive compensation, along with board monitoring actions, is one of the most important components of corporate governance structures (Core et al, 2003), and Agency theorists consider the optimal compensation contract as the one that ties the manager's expected utility to the shareholder's wealth (Jensen and Murphy, 1990). Thus, linking manager's pay to firm performance would, according to the

agency perspective, enable a better alignment of interests between shareholders and managers' interests.

According to orthodox agency scholars, the primary role of the board is to hire, fire, and set remuneration of top management (Fama and Jensen, 1983; Jensen, 1993; Finkelstein and Hambrick, 1996; Tosi et al, 1997; Jensen et al, 2004). Hence, the likelihood to set an optimal compensation contract is highly dependent on the board ability to manage the remuneration setting processes, including information gathering, CEO and top management market assessment, negotiation expertise, power relationships and board independent judgement, in addition to a deep understanding of the pay to performance sensitivities (Bebchuk and Fried, 2004; Jensen et al, 2004). Empirical evidence on the relationship between board independence and top management compensation is, however, highly inconclusive (Johnson et al, 1996). Indeed, some studies reported a non significant association between independence and compensation levels (Mangel and Singh, 1993; Kerr and Kren, 1992; Carpenter and Sanders, 2002), while others found a positive relationship when outside board members are appointed by the CEO (Zajac and Westphal, 1995; Core et al, 1999). Finally, a negative association between insiders dominated boards and compensation level was also reported (Boyd, 1994).

Compensation issues were largely investigated under the agency perspective (Jensen and Murphy 1990; Agrawal and Knoeber, 1998; Healy, 1985). Theoretically, incentive mechanisms in form of a performance based compensation such as stock related packages and deferred cash compensation are supposed to enable a better alignment of interests between managers and shareholders, particularly, when agents' activities and behaviour are hard to be efficiently monitored (Eisenhardt, 1989; Jensen and Murphy, 1990; Shleifer and Vishny, 1997; Gomez-Mejia and Wiseman, 1997; Tosi et al, 2000).

Compensation packages became, therefore, increasingly sophisticated and complex, leading to a mix of fixed and variable, direct and indirect, short-term and long-term components, and while their fixed components, such as base salary tended to decrease in the last decades, the proportion of variable compensation

linked to performance has become the dominant form of executive remuneration schemes.

Consequently, the increasing use of variable or performance based compensation led to the creation of a variety of short and long term incentive packages. Thus, and according to Murphy (1998), short-term incentives in form of bonuses are generally based on three categories: (1) *Performance measures*: based on revenues, income (net and pre-tax), profits or Economic Value Added; (2) *Performance standard*: based on budget goals, previous growth, board assessment of business plans, peer comparison or cost of capital improvements; and (3) *Pay-for-performance structures*: based on a defined target bonus pools that could vary depending on the performance standard, or could take a form of discretionary plans determined subjectively by the board of directors on the basis of organizational or individual manager's performance.

Among all the incentive components, long-term incentives received a particular attention during the 90s and continue to represent the most important part of the executive pay packages. Long-term incentives are designed in a way that encourages executives to pay more attention to long term strategies and firm performance instead of prioritizing short term efficiency. This category of incentives include *stock purchase plans, stock options plans, stock awards or appreciation rights, and deferred performance units* (Murphy, 1999; Henderson, 1997; Dessler et al, 1999).

However, executive compensation remains a highly controversial issue within both the academic and the business communities, especially, when it comes to the determination of optimal structures and levels or to the assessment of pay to performance sensitivity. Indeed, the use of long-term incentives, such as stock ownership and stock options, yielded controversial results, particularly, when the risk aversion phenomenon is considered. On one hand, Managers are generally considered risk-averse (Eisenhardt, 1989; Denis, 2001), and if a large part of their wealth is invested in the company through equity plans, they'll inevitably consider themselves as taking a high downside risk and expect, consequently, a higher rate of

return from the projects the company have to invest in. On the other hand, shareholders are considered as risk neutral because of their ability to diversify their investments, and their return expectations are, therefore, lower than those of their agents. This discrepancy between the principal's and the agent's return requirements constitutes a major source of their diverging interests, implying that managers will, simply, not invest in projects that not meet their expected rate of return even if it is worthwhile from the shareholder point of view.

Furthermore, empirical evidence on the relationship between performance and equity ownership (i.e. Insider ownership) is mixed. While Demsetz and Lehn (1985) and Loderer and Sheehan (1989) found no relationship between the level of executive equity ownership and firm performance, other researchers reported, at best, a weak positive, but instable association (Morck et al, 1988; McConnell and Servaes, 1990; Mehran, 1995; Loderer and Martin, 1997; Core and Larcker, 2002). Furthermore, several researchers identified a non-linear relationship between managerial ownership and firm performance (Morck et al, 1988; McConnell and Servaes, 1990; Hermalin and Weisbach, 1991) and argued that high managerial ownership could induce managers to exert insufficient effort, maximize private benefits and adopt entrenchment behaviour (Morck et al, 1988, Short and Keasey, 1999). The management entrenchment hypothesis suggests, therefore, that managers with high stockholdings would seek to design control systems that enhance their private interests (Shleifer and Vishny, 1989; Edlin and Stiglitz, 1995; Bebchuk et al, 2004) and decrease (or neutralize) the effectiveness of the other governance mechanisms, including the shareholder participation in policy making processes and board monitoring ability (Weisbach, 1988; Dann and DeAngelo, 1988; Boeker, 1992; Denis et al, 1997).

Entrenchment behaviour could also lead top executives to invest in projects or acquisitions that contribute to protect their own job and to enhance their power and benefits at the expense of the firm shareholders (Walsh and Seward, 1990; Edlin and Stiglitz, 1995).

Moreover, stock option plans became the fastest growing component of executive compensation (Murphy, 1999). This growth could be explained by: (1) the non linearity that stock options add to the executive rewards instead of the linear nature of direct stock ownership rewards; (2) the need for firms to overcome cash constraints associated with the competition for talent; and (3) the timing advantages associated with tax efficiency (Denis, 2001). In addition, options grants were not considered, until recently, as expenses and were not supposed to affect firm net earnings. However, this latter argument is not holding anymore with the FAS 123R issued in December 2004.

According to Allaire (2003), stock options based compensation is an expensive form of management incentives, particularly, if we consider their impact on earnings per share. This view adds, therefore, another aspect to the negative effects of stock options reported by several other researchers (Rappaport, 1999; Clawson and Klein, 1997). Furthermore, recent studies have reported a positive association between option-based compensation and the likelihood to commit fraud, to restate earnings and to undergo lawsuits (Johnson et al, 2003; Roell and Peng, 2006; Denis et al, 2005; Agrawal and Chadha, 2005). Another criticism, pointed out by Allaire (2003), is the lack of a valid indexation between the exercise price and the general performance of the stock market. This absence of indexation gives executives a premium for the passage of time, in the words of Warren Buffet, and will always imply a negative perception on managers when the stock price fall after they cash their options, which could means that managers should not exercise their options as long as they work for the company given that no one could ensure that the firm stock price will not fall during a given period (Allaire, 2003). Instead of proposing a valid indexation, several unrealistic proposals were made in order to constrain the exercise of options, such as the prohibition of exercising options before retirement, which could reduce the value and the attractiveness of options as an incentive compensation mechanism (Allaire, 2003).

To solve this recurrent problem, and give options a life back, Allaire (2003a) proposed several measures: (1) Board should carefully calibrate the percentage of gain in value of shareholders equity to be shared with management; (2) option grants

should be linked to an adequate measure of economic performance; (3) the exercise price should be indexed by the firm's cost of equity or any other relevant market index (Allaire, 2003); (4) senior management level of shareholding should be linked to some multiple of their salary; (5) the vesting period should be fixed within a range of three to five years and the life of the option should be limited to five years; and (6) insiders should inform the securities commissions of their intention of buying or selling company shares one month before the transaction date. But ultimately, Allaire and Firsirotu (2009) propose the elimination of all sorts of options and conclude that:

"It was a major mistake, and a source of many shenanigans, to link variable compensation of executives directly to the stock price. It may have seemed a simple and effective way of tying the interest of management to the interest of shareholders. In practice, however, stock prices are very volatile, are influenced by numerous factors beyond the control of management, yet can to a large extent be manipulated in the short term. Therefore, we recommend that compensation in the form of stock options, restricted shares or their equivalent, be banned" (2009, p.247).

In addition, firms tend to adopt compensation systems that enhance their institutional legitimacy in regard to their shareholders, and institute measures that signal a sound board control and absence of any significant agency problems (Tolbert and Zucker, 1983; Westphal and Zajac, 1994). Hence, the adoption of popular measures dictated by normative and mimetic processes (Dimaggio and Powell, 1983) has led numerous firms to understate their specific reality, to ignore the dynamic and the real sources underlying their value creation and, above all, to not assess the real impact of management actions on their market value, or the effect of other important phenomena, such as, talent mobility on its ability to create sustainable value (Allaire, 2003).

In summary, compensation issue, both non-equity and equity-based, remains highly controversial, and agency theorists have generally recommended vague prescriptions lacking a careful assessment of their potentially negative implications, which led to counter intuitive effects (Bebchuk and Stiles, 2004).

Thus, if we concede to the agency theory its contribution in the clarification of the corporate governance problems, we should admit however its flaw when it comes to address the consequences of these problems. Indeed, and while considered by its tenants as an optimal solution, the compensation mechanism is actually suffering from a lack of rigor and effectiveness, particularly, if implemented without a sound and careful assessment of the firm specific reality, as pointed out by Allaire (2003; 2003a). These flaws were also, in some way or other, acknowledged by the main tenants of the agency perspective as we could notice in Jensen et al (2004), even if they largely attributed the recent governance failure to external factors, such as, the market *enthusiasm*, and not to some weaknesses of agency theory's core prescriptions that induced, in many cases, pervert behaviour and value destructing actions.

2.1.2.3 Ownership structures and other internal mechanisms:

In addition to the board of directors and executive compensation, agency theory prescribes several alternative mechanisms to achieve goal congruence between managers and shareholders, such as debt and dividends policies or ownership structures that may be used simultaneously (or as substitutes) with (to failing) board monitoring and executive compensation (Agrawal and Knoeber, 1996).

Debt policy may be used to mitigate the potential agency costs of free cash flow by committing managers to generate cash and meet the firm interest and principal obligations (Grossman and Hart, 1982; Jensen, 1986; 1993; Stulz, 1988). In addition, Debt is supposed to reduce total equity financing and the need for external equity to be issued, which could facilitate managerial ownership and mitigate, therefore, the manager-shareholder conflict, especially, when the initial owner-manager is still the major and dominant stockholder. Debt is also supposed to reduce information asymmetry that surrounds equity based firm value (Myer's and Majluf, 1984), particularly, in the case of short-term debt, which enables outside investors to monitor managers through signalling and renegotiation mechanisms (Flannery, 1986; Diamond, 1991; Franks et al, 2001).

However, debt generates its own agency costs which may compromise its bonding commitment. Indeed, the cost of debt may increase following suboptimal investment decisions associated with higher risk levels, higher monitoring and bonding expenditures by debt holders, and bankruptcy or reorganization costs (Smith and Watts, 1992; Jensen and Meckling, 1976). To be efficient as a disciplining mechanism, debt level should be determined by balancing the equity cost reduction benefits against debt agency costs within a given context. Indeed, McConnell and Servaes (1995) assert that, depending on firm context, debt could have a positive or a negative effect on firm value, and that negative effects are particularly present in the case of companies evolving in environments with multiple growth opportunities. Moreover, Agrawal and Knoeber (1996) showed that, to be effective, the use of debt should be coupled with internal monitoring exerted through inside shareholders, or outside members of the Board. They suggested also that high debt financing tends to be negatively related with firm performance, while in opposition, improved performance may lead to less debt financing.

Moreover, Dividend policy is another internal mechanism expected to control equity agency problems. While Jensen (1986) considers dividends as a way to avoid management overinvestment in non value maximisation projects, other researchers such as Easterbrook, (1984) stated that dividends payment may signal the effectiveness of primary capital market in monitoring firm's activities and performance (i.e. disciplining management), especially, in the case of firms planning to raise capital through common stock selling (Smith, 1986; Fluck, 1998; Jain and Kini, 1999; Myers, 2000).

Given the interdependency of debt, dividends and insider ownership, Jensen et al (1992) used a three stage least square equations system to test the relationship between these three mechanisms. They found a negative relationship between management ownership, dividend and debt policies, and concluded that the causality was likely to run only from management ownership to dividend and debt policies' uses. Thus, dividend and debt mechanisms will not reduce agency costs when management ownership is important, indicating a substitution effect between the three mechanisms (Crutchley and Hansen, 1989).

As another agency mechanism, large outside shareholders are likely to play an active role in monitoring management behaviour and firm performance (Demsetz, 1983; Demsetz and Lehn, 1985; Shleifer and Vishny, 1986; 1997; Holderness, 2003). However, blockholder impact on firm governance will be different in the case of individual, family or institutional shareholding.

Hence, and while family controlled firms are viewed by agency theorists as inefficient and backdated structures that may hinder the efficiency of the takeover mechanism, Institutional concentrated shareholding structures are considered by the agency perspective as likely to increase firm takeover probability (Shivdasani, 1993), which constitute a potentially disciplining governance mechanism that forces management to pursue shareholders interests (Fukuyama, 1995; Schulze et al, 2001). It is also argued that large Institutional shareholding may be associated with higher takeover premiums (Burkart, 1995; Sudarnasaram, 1996), while public-traded family firms incur higher cost of capital, due to the premium paid to minority shareholders in order to compensate them for the expropriated private benefits that the controlling owners will potentially enjoy through their control rights (Shleifer and Vishny, 1997; La Prota et al, 1999).

Furthermore, empirical evidence shows that even if there is no clear and unrelenting evidence of its impact on increasing firm value or firm performance (Karpoff, 2001; Romano, 2000), Institutional shareholding would lead to shareholders activism (Smith, 1996; Brickley et al, 1994) which would, in turn, alter the firm governance structure by moderating management compensation (Hartzell and Starks, 2003). An exception to this assertion is the study, by McConnell and Servaes (1990), which reported a direct positive association between the fraction of shares owned by Institutional investors and performance, as well as an indirect positive impact on firm performance through insider ownership reinforcement.

According to some authors, concentrated ownership structures, conversely to the widely held ones, are characterized by a mitigated agent-shareholders problems and a more significant principal-principal conflict that consist in the potential risk of

expropriation by the controlling shareholder of minority rights (La Porta et al, 1998; 1999; Dyck and Zingales, 2004). Drawing on the Morck et al (1988)'s definition of expropriation, Dharwadkar et al (2000) stated that: "*expropriation occurs when firm performance decreases because of individual ownership, reaching a point where large owners assume full control and use the firm to generate private benefits at the expense of minority shareholders*" (Page: 659). Opponents of concentrated ownership forms, particularly the family owned ones, argue that these structures may lead to suboptimal investments (Bebchuck et al, 2000), tunnelling (Johnson et al, 2000), perk consumption (Yermack, 2006), wealth preservation and poor management capabilities to run large-scale, complex and technologically advanced structures (Chandler, 1990) and for some radical foes, to the impediment of economic growth at the macro level for countries where these structures are prevalent (Morck et al, 2005).

On the other hand, proponents of family held firms put forward that these structures tend to exhibit, under some particular circumstances (i.e. firms with founder serving as the CEO, with founder as chairman with a non-family CEO or family firms with higher board independence), higher performance than other forms of ownership (Anderson and Reeb, 2003; 2004; Durand and Vargas, 2003; Miller et al, 2005, Villalonga and Amit, 2006). Similar findings were also reported in studies from Western Europe (Maury, 2006; Barontini and Caprio, 2006). However, Miller et al, (2007), conclude that only family firms with lone founders as CEO (i.e firms in which no relatives of the founder are involved) outperform the other forms of corporations. Furthermore, King and Santor (2008) found that Canadian family firms are more profitable than the widely held ones, exhibiting a higher returns on assets (ROA) than the average in their sample.

Individual or family control is generally achieved by separating ownership and control rights through pyramidal and cross holdings schemes or through the use of dual-class shares (La Porta et al, 1999). In Canada, the use of Dual class shares by families is very common (Allaire, 2006; 2008; Gadhoum, 2006; King and Santor, 2008) and the controlling shareholder is very often the CEO of the company (Gadhoum, 2006). Indeed, the latter documented that more than 55% of his sample

(composed by 1120 listed Canadian firms) have a controlling shareholder who is also a top manager (at 10% cut-off) , while at the 20% cut-off, this proportion increased to reach 65,9% of the same sample. Allaire (2008: p.6) reports that *"An assessment of the 253 Canadian firms making up the S&P/TSX Index (that is, the largest listed corporations in Canada) reveals that 53% of them have at least one shareholder with 10% or more of the votes. These companies represent 40% of the market capitalization of the S&P/TSX Index" ...and that "the voting power of these significant shareholders comes from direct holdings in three quarters of the cases and from superior class of shares in a quarter of cases"* (p.7).

Following a close examination of the extant literature on the effect of concentrated ownership and the use of dual class of shares, Allaire (2006) and Allaire and Firsirotu (2009: p.236-237) propose an interesting framework to extract the benefits associated with family-controlled firms using dual class shares while ensuring the protection of minority shareholders and note that: *"An appropriate framework should contain some of the following prescriptions:*

- *All classes of shares should be entitled to receive the same terms and conditions in the event of a proposed takeover of the company. This stipulation is called a "coattail" provision in Canada and has been enforced by the Toronto Stock Exchange since 1987;*
- *The class of multiple-vote shares should be capped at 4:1, that is four votes as compared with one vote for the other class of shares (compared to the typical 10:1 observed now); this maximum ratio means that the controlling shareholder must own at least 20% of the equity to maintain an absolute control over the votes (i.e. 50% or more). Studies show that too large discrepancy between share of votes and share of equity rapidly reduces the benefits of control (Gompers, Ishii, and Metrick, 2006). Class of shares without any voting right should be banned;*
- *The class of shares with inferior voting rights should elect one third of board members;*
- *Whenever a kin or descendant of the controlling shareholder is a candidate for the CEO position, independent members of the board must discuss the*

merits of various candidates with the controlling shareholder and report fully at the next annual meeting of shareholders on the process by which the board arrived at a decision;

- *A special committee of the board, made up of members independent from the controlling shareholder, should review and report on all transactions between the company and related parties;*
- *When non family member of the controlling shareholder is likely to play in the future a significant role in the management or the governance of the company, the board and the controlling shareholder should discuss what ownership structure would be best to ensure the firm's success in the future and protect its founder's legacy."*

As to the case of acquisitions, Yen and André (2007) found that in Anglo-Saxon countries, higher levels of ownership are associated with post-acquisition performance (measured by the operating cash flow returns) over the 3 years after the acquisition, while the separation of ownership and control leads to value destruction. Furthermore, Ben-Amar and André (2006) concluded in their study of the impact of ownership on acquisition performance in Canada that: *"Results suggest that the criticism of family owned firms (Nguyen, 2002), often based on a governance model developed for dispersed ownership countries like the US and the UK may not be warranted. While large shareholders can impose costs to small shareholders by tunnelling earnings or by imposing sub-optimal investment decisions, these shareholders can add value by the competencies they bring to the firm and the monitoring role they play."* (2006, p. 538).

In view of the fact that our thesis investigates which governance variables could better discriminate between successful and unsuccessful acquisitions in Canada, the role of concentrated family ownership and the separation of ownership and control on corporate governance quality and value creation cannot be ignored. Thus, we shall include in our empirical model developed in chapter 4, some relevant variables that would take account of these important issues.

2.1.3 External mechanisms

External governance mechanisms- such as efficient market for corporate control, competition on product and managerial labour markets, legal environment, as well as security analysts and other gatekeepers, including external auditors or debt rating agencies- may intervene when internal mechanisms fail to address firm agency problems (Jensen and Meckling, 1976; Grossman and Hart, 1980; Fama and Jensen, 1983; Walsh and Seward, 1990; Shleifer and Vishny, 1997; Daily et al, 2003).

Corporate takeovers or market for corporate control is the major mechanism highlighted by agency theorists and considered as an effective way to filling up internal governance failures in circumventing and monitoring management behaviour (Easterbrook and Fischel, 1991; Jensen, 1993). The basic assumption behind this mechanism is that inefficient or value destructing managers will face the threat to see their company acquired by a raider, which would generally fire them, manage it in a better way, and in some cases, sell it back at a premium price. Jensen (1986) considers takeovers as a solution to the free cash flow problem, while Jensen and Ruback (1983) argue that takeovers increase the value of the combined entities. In practice, however, the takeover mechanism is likely to be activated only in the case of a very poor performance that goes beyond the takeover costs to be supported by the bidder (Shleifer and Vishny, 1997; Morck et al, 1989). The governance model based on shareholder rights, and highly advocated by Gompers et al (2003), is largely based on this mechanism and considers it as superior to any other governance device (Allaire and Firsirotu, 2003).

However, and as long as the share price stands above the takeover costs (i.e. search costs, bidding costs and the premium offered to induce reluctant shareholders), managers could continue to underperform without fearing the threat of takeovers. Indeed, this threat could be more effective than the takeover operation itself, given that the corrective actions following takeover operations intervene when the costs of managers' misconduct have already caused important decline in firm value (Farinha, 2003). Thus, the real benefit that firm shareholders will extract from

an efficient market of corporate control is its deterring effect on managers, rather than hostile offers manifestations that occur only when internal governance mechanism have already proved to be not effective in the first place.

Furthermore, anti takeovers legislations and firm internal provisions, such as the greenmail provisions, poison pills and dual class shares, largely and fiercely banned by agency theorists, were widely adopted as solutions for hindering and offsetting the supposed effectiveness of the takeover mechanism. In some cases, unconstrained takeover activities could threaten the national economy of countries that have weak takeover legislations, which could lead to the concession of strategic industrial sectors to foreign interests. In Canada, the recent wave of takeovers initiated by foreign investors, and largely attributed to the lack of sufficient anti takeover legislations and Canadian boards' legal ability to reject hostile offers, have raised numerous questions about the benefits of free takeover markets for the Canadian economic sovereignty (Allaire and Firsirotu, 2008).

The product market may also affect the behaviour of management, particularly, in contexts of high competition. Though Agency theorists consider that product market competition may have some positive effect in disciplining managers, they remain largely sceptical about its effectiveness as an alternative governance mechanism. Indeed, while Jensen (1993) considers it as a "*blunt governance mechanism*", Shleifer and Vishny (1997) recognize that product market competition would contribute to better corporate governance by limiting the amount of available returns that managers can expropriate, but cannot prevent expropriation *per se*. Recent studies tend to show some direct and significant effect of product market competition on governance mechanisms such as managers' compensation. Thus, Aggrawal and Samwick (1999), as well as De Fond and Park (1999) and Karuna (2007) have all reported evidence that product market competition reduce the marginal costs supported by shareholders to determine optimal incentive contracts.

Managerial labour markets constitute another external mechanism that contribute to discipline managers through wage level fixation, managers' turnover, manager performance and its implication on potential job and directorship

opportunities, reputation, and mutual monitoring by other top managers (Fama, 1980; Fama and Jensen, 1983; Warner et al, 1988; Gilson, 1989; Cannella et al, 1995; Murphy 1999; Yermack, 2004; Aggrawal et al, 2006).

Financial analysts and other Gatekeepers (i.e. service providers) may also play a monitoring role by scrutinizing and publicising management actions and performance (Jensen and Meckling, 1976; Moyer et al, 1989). However, this mechanism is not available to all firms, and tends to have some significant positive effect only in the case of large, public firms with a significant portion of dispersed shareholdings.

Finally, the legal environment plays an important role in enhancing or neutralizing corporate governance mechanisms. Thus, anti takeovers legislation may hinder the threat of the market for corporate control or at the other extreme, could contribute to transform this market in a highly damaging one for the focal country's economy. Furthermore, the mandatory versus the voluntary aspects of the stock exchange rules may also contribute or restrain the adoption of widely accepted practices, while the extent to which the legal system actually protect minority shareholders may play a significant role in making firms adopt or discard appropriate corporate governance structures (Shleifer and Vishny, 1997).

2.1.4 Conclusions on the agency perspective

The above sections covered several internal and external governance mechanisms used by firms to reduce agency costs, and to circumvent management discretion by inducing or compelling managers to align their interests with those of firm shareholders. Therefore, it was noted that for agency theorists, monitoring and information systems, such as board of directors, budgeting systems and peer monitoring are considered as the primary governance devices when good information is available on firm performance and management behaviour. However, in the absence of such a *good information*- which is generally the case of large, diversified and widely held firms- principals should use incentive outcome based contracts, along with some compulsory features, such as the right to terminate the

agent contract, in order to induce management to take actions that are consistent with the shareholders' interests. Compensation packages, inside ownership, debt and dividend policy are, according to agency theorists, the primary internal devices to consider in solving the agency problem, while the takeover threat, the competition on product and labour markets, financial analysts and the efficiency of the legal system are external mechanisms that may intervene only when internal structures fail to address the agency issues.

As the main monitoring governance mechanism, board of directors should be structured in a way that enables board members to effectively exert their control decision function. Independent boards, composed by a majority of outsiders, are supposed to be the guardians of shareholders interests and should focus their activities on watching what management do in order to take corrective or disciplining actions when the latter departs from shareholders interests' maximisation.

The concept of *Independence* was, however, merely measured by the outsider/insider proportion and the absence of any *material relationship* between the company and its directors, which, in addition to the lack of a rigorous definition and proxies associated with it, have led to confused, mixed and inconclusive evidence on the positive impact of independent boards on firm performance.

Furthermore, and while the objectivity and monitoring ability accorded to non executive directors appear theoretically appealing, *outside* and *materially independent* directors may become heavily *dependent* on management for getting relevant, and specific information on firm activities and performance, which tend to exacerbate the information asymmetry problem that corporate governance is all about. Indeed, a recent survey by Heidrick and Struggles (2007) indicated that more than 69% of boards have no independent information channels that provide them with useful information on firm operations and management activities.

Thus, the real problem of contemporary boards is the systematic lack of timely, accurate and independent information that would enable them to monitor effectively management actions and to provide, ideally, a valuable input and play a

more active and value adding role in the firm strategy making processes. However, information availability would not constitute, by itself, a sufficient condition for an independent board to fulfill effectively its role, no matter if it is a monitoring or a strategic one, especially, when directors have no relevant experience, knowledge, analytical skills, and most of all, the motivation and the incentives to be actively involved in firm businesses and strategic processes.

The other internal mechanisms suggested by agency theorists, such as, management compensation, insider ownership, ownership concentration, or debt and dividend policies proved difficult to be effectively implemented, either individually or jointly. Indeed, while compensation remains a highly controversial issue, and some of its components, such as the non indexed option grants, have led to perverted and short-term oriented management behaviour, higher levels of insider ownership increase the likelihood of entrenchment behaviour, which may neutralize the effectiveness of the other governance mechanisms.

Ownership concentration, debt and dividend policies are simultaneously determined and suffer from substitution effects, and their effectiveness is contingent to the presence of numerous internal and external factors, such as investment choices, the extent of fixed assets, risk exposure, growth conditions and investment opportunities.

Finally, external governance mechanisms, such as the market for corporate control are to be considered as a last resort solution, and are ineffective to prevent management's departure from creating firm value, given that their intervention comes, generally, when performance have already reached a critical level.

All in all, the literature review of internal and external governance mechanisms bring out the fact that agency theory, despite of its strong and well articulated theoretical framework that clearly outlines the governance problem, has understated the consequences of the one-dimensional, simplistic and instrumental conception of its main prescriptions. Thereby, the board of directors' limited monitoring and fiduciary role, as well as the consequences of ill-defined core

concepts that underlie it such as board independence, or performance based compensation forms, have all contributed to the notorious and awkward corporate governance failures witnessed in the dawn of the current decade.

Agency theory should, therefore, be complemented by other theories in order to overcome its own shortcomings and weaknesses by capturing the real complexity of organizations (Eisenhardt, 1989). The board of director strategy role, that the agency theory has vaguely considered and highly understated (Pearce and Zahra, 1989; McNulty and Pettigrew, 1999; Hill, 1995; Stiles and Taylor, 2001) should retain more attention in order to enable the board of directors to be more effective in solving the agency problem through a real contribution in shaping and implementing firm strategies.

The next sections highlight the assumptions and the implications of other relevant theories that complement the agency perspective, which will help us to develop the multi- theoretical ground to be used for the present study.

2.2 The Managerial hegemony theory

2.2.1 Literature review and previous research: Boards of directors as legal fictions

The concept of separation between ownership and control, discussed in the previous section, leads us to another well established tradition called managerial hegemony, within which, several scholars attempted to describe board of directors role and influence on the decision making processes of the firm. Managerial hegemony belongs to what Pettigrew (1992) have called the field of *managerial elites studies* and tends to encompass research in relation to CEO selection and compensation, strategic leadership and decision making, top management teams, Interlocking directorates and the study of board of directors.

In its broad sense, managerial hegemony is achieved when managers consider themselves as the only group able to represent the concerns of all the organizational actors. Therefore, managerial hegemony theory considers that firms' success rests with their managers (Lorsh and MacIver, 1989) and tends to portray

board of directors as an ineffective, symbolic and legal requirement that may occasionally serve management by providing some passive advice and counselling (Mace, 1971; Pfeffer, 1972; Vance, 1983; Patton and Baker, 1987; Kosnik, 1987; Lorsh and MacIver, 1989). According to Kosnik (1987), Managerial hegemony's view of directors draw on a Marxist sociological tradition that considers boards as an instrument used by the American upper classes to reinforce their ruling power in modern society. In addition, Stiles and Taylor (2001) argue that this perspective was, for a long time, reinforced by the looseness of the legal specifications of board's duties, especially the fiduciary duty of care and the business judgement rules that boards are supposed to observe.

Though agency theory shares with managerial hegemony the same assumptions on self-serving behaviour, information asymmetry, as well as on the implications of Berle and Means's separation of ownership and control, its conclusions and conception of boards role seem to be an antithesis of the management hegemony conception (Rindova, 1999). Thus, management theory considers that boards are dominated by their managers, while agency theorists seek to prescribe how boards should, along with the other internal and external mechanisms discussed in the previous sections, circumscribe management discretion and control over firm resources.

For the managerial perspective, board of directors have no real power on firm activities or performance, and their selection and nomination are largely influenced by managers (Mace, 1971; Pfeffer, 1972). Furthermore, its proponents argue that outside directors have usually no sufficient time, information, knowledge and expertise to exercise effectively their independent control function (Estes, 1980; Herman, 1981; Lorsh and MacIver, 1989). Bebchuck et al (2002) and Bebchuk and Stiles (2004) have extensively described how managers, especially the CEO, dominate board decisions on compensation setting by affecting the nomination process of directors, and by exercising their authority over the board members, in order to extract personal benefits. Also, managers of profitable firms tend to reduce their dependence on shareholders and their agents (i.e Board of directors) by reinvesting retained earnings instead of seeking external financing (Mizruchi, 1983).

Finally, other structural factors, such as board size (Herman, 1981), insider directors' proportion, board norms and culture (Pettigrew and McNulty, 1998) may also support board ineffectiveness in reducing the potential agency problem that spring from the separation between ownership and control.

Thus, Pettigrew and McNulty (1995; 1998) investigated power relationships between boards and management in order to identify contextual, structural and process-related contingencies that contribute to board activeness and found that board degree of activeness is function of the outer and inner contexts' features.

They found that outer context such as political, social and legal environment, along with the accepted governance codes of practice, culture and history of some industrial sectors may influence (and are influenced by) the structural conditions of the inner context features, especially, the board own history and culture, its norms of conduct, the patterns of selection and socialization of board members, and the directors' role expectations and perceptions.

Finally, they asserted that, in order for board members to build and use an enabling power base, they should possess a relevant sector and functional experience, prestige, access to people, relationships and information inside and outside the firm, as well as the ability to form coalitions with external key figures. In addition to the existence of an enabling power base, directors should have the willingness and skills to use their power sources if they are willing to influence constantly the firm decision making processes, rather than intervening only when the firm is facing a major crisis.

2.2.2 Conclusions and implications from the managerial hegemony perspective

The Managerial hegemony propositions and findings are very useful in understanding the circumstances within which boards can play an ongoing active role in firm decision making, especially, in formulating and executing firm strategy instead of waiting for major crisis or poor performance to do so (Lorsh and MacIver,

1989). We will consider the implications of these findings by integrating them with the other perspectives in the theoretical framework presented in chapter 4.

Finally, and despite their apparent divergence, agency theory and Managerial hegemony theory are highly complementary in setting the contextual contingencies for the corporate governance system (Kosnik, 1987). Thus, and besides its negative view of boards and its lack of proposing adequate and positive solutions to solve the governance issue, the Managerial hegemony perspective has the merit of pointing out the causes of board passiveness and ineffectiveness, which invites us to re-examine simultaneously the selection processes of board members, the relevance of their skills and experiences, the motivations or constraints that impede them from dedicating more time to firm affairs, their ability to have access to relevant information and their predisposition to shape and use their power sources in a given structural setting.

2.3 The Stewardship theory

2.3.1 Literature review and previous research: Directors and Managers as Stewards

Drawing on sociological and psychological perspectives, stewardship theory challenges the basic assumptions of the agency perspective (Donaldson, 1990). However, and rather than pretending to substitute the agency theory, the original proponents of the stewardship perspective have reconsidered their position by attempting to propose a contingency approach that reconciles the two theories (Davis et al, 1997).

Though it is concerned with organizational control, the stewardship perspective derives its principal assumptions from the organizational behaviour school of thought, and considers managers as good stewards rather than self-interested, maximizing and opportunistic agents (Donaldson and Davis, 1991). Accordingly, managers are not always motivated by extrinsic and material incentives

and are not necessarily seeking personal wealth, status or leisure, but are interested, rather, in self actualization, responsibility, achievement and social recognition.

Furthermore, they are team players predisposed to accept authority, and their behaviour is not always conscious (Donaldson and Davis, 1991). The most important assumption that distinguishes radically the stewardship from the agency theory is the absence of any conflict of interest between managers and owners. Thus, the stewardship perspective considers that corporate governance should focus on setting structures that facilitate managers' empowerment and not on establishing formal and costly monitoring systems to align the interests of the agents with those of their principals (Donaldson, 1990). Thus, managers tend to make a trade-off between their personal needs and their organizational objectives and choose to become stewards when they perceive that the utility extracted from pro-organizational behaviour exceeds the utility gained through self-serving conduct (Davis et al, 1997).

In addition, stewardship theorists consider that self-control and self-management (Argyris, 1964), through identification and shared organizational vision, are the most effective control mechanisms, and this view is reinforced by the assumption that managerial tasks' formulation, execution and control should not be viewed as separate parts (Lawler, 1986; 1922 quoted in Davis et al, 1997). Thus, Collectivism, pro-organizational behaviour and trust are, therefore, the cornerstones of the stewardship theory.

Besides, and in order to avoid the trap of substituting the "*self actualizing man*" proposed by the stewardship theory for the criticized, one-dimensional and narrower view portrayed in the "*economic man*", and largely used by the agency perspective, Donaldson (1990) and Davis et al (1997) concede that the reliance on one or the other of the two perspectives depends on numerous contingency and situational factors. Contingency factors refer to the psychological predisposition of managers and the nature or level of risk that the principal is willing to take, while situational factors are those related to the organizational structure, culture and power relationships. However, stewardship proponents claim that in normal times, firms

tend to function under the conditions of coalition between managers and owners, and that conflicting and diverging interests will arise only in specific situations such as that of a takeover event, in which, the agency theory becomes more relevant (Donaldson, 1990).

In line with these assumptions, the governance prescriptions that emanate from the stewardship perspective prone insider dominated boards, the duality of the CEO and the Chairman positions, and the significant collaboration and involvement of Boards in the strategic processes of the firm. Board members are considered therefore as mentors and are supposed to actively guide and support incumbent management to accomplish the organizational mission and goals (Shen, 2003).

The distinction between *Institutional* (coercive, legitimate and reward power) and *Personal* (expert and referent power) components of the power concept - borrowed by Davis et al (1997) from French and Raven (1959) and Gibson et al (1991) - offers an interesting insight on the complementary nature of the agency and stewardship perspectives, and highlights the attributes that boards and their members should possess in order to effectively fulfill their role. Thus, agency theory relies heavily on the institutional power, including the legitimate authority of the principal (and by extension the board of directors), the use of appropriate incentives to align management and shareholders' interests and the threat of employment termination to discipline managers. Conversely, stewardship theory relies on the expertise and referent powers of the board members to induce management's collaboration. The power of expertise refers to distinctive knowledge, expertness, skills and abilities that command managers' respect and esteem, while power referent refer generally to board members that possesses some powers or some prestige that induce managers to identify themselves with these directors or to seek how to become associated with them (Davis et al, 1997; French and Raven, 1959).

A more realistic and balanced proposition that alleviates the tensions between the agency and the stewardship theories was provided by Sundaramurthy and Lewis (2003), who highlighted the potential dysfunctions associated with reinforcing cycles of both the control and the collaboration approaches, and showed

how to integrate them in order to avoid their respective pitfalls. Indeed, they stated that, on one hand, the reinforcing cycles of control-oriented governance lead generally to board and management polarization, to the restriction of information flows, to myopic behaviour that impede risk taking and suppress organizational learning, as well as to clan fights and impression management (Sundaramurthy and Lewis, 2003). On the other hand, they noted that the reinforcing cycles of the collaboration oriented governance lead to groupthink (Janis, 1982), overconfidence, the discounting of environmental change, complacency and entrenchment behaviour, consensus seeking, and higher commitment to irrelevant and suboptimal strategies.

Consequently, Sundaramurthy and Lewis, (2003) noted that a balanced combination between control and collaboration components is needed to create self-correcting cycles that replace the self-reinforcing ones and enable trust to cohabit with constructive cognitive and task-oriented conflicts. Finally, they concluded that for this integration to be successful, governance structures should, however, encourage board members background's diversity, as well as outsider-insider mix within the boardroom, board-management formal and informal interactions, and board subcommittees' involvement and dynamism (Sundaramurthy and Lewis, 2003). These propositions are in line with the proposal of balancing the humanistic and the economic perspectives in order to come out with an efficient incentive system and with the *value creating governance* model proposed by Allaire and Firsirotu (1993; 2003; 2004) and discussed in details in section 2.6.

Indeed, Allaire and Firsirotu (1993; 2004) stated that the challenge for the organizational life consist in reconciling the humanistic and the economic concepts of man through a balanced incentive systems that integrate monetary incentives with aspirations and psycho-sociological needs of people. Indeed, these two perspectives carry useful teachings, and whenever an organization shifts to an incentive system based on a strict economic perspective or a radical humanist view, perverse and dysfunctional behaviour will inevitably arise (Allaire and Firsirotu, 1993; 2004).

As described by Allaire and Firsirotu (1993; 2004; 2009), the economic perspective considers that “...*man is, by nature, a greedy, calculative, opportunistic, homo economicus, to be controlled by fear and motivated by appealing to his selfish nature*” (2009, p.79-80). Thus, and according to the agency theorists, human self serving propensities of agents could be controlled through financial incentives that align the interests between these self maximizing agents and their principals (Jensen and Meckling, 1976) and through governance structures characterized by tight monitoring and control devices (Williamson, 1975). In a more positive way, organizational actors, like any other resources, are considered as specific, valuable, imperfectly mobile and costly to reproduce key resources (Wernerfelt, 1984; 1989; Barney, 1986; 1991; Rumelt, 1987; Conner, 1991) that contribute to competitive advantage.

Moreover, the humanistic view considers humans as social actors motivated by self actualization (Maslow, 1968; McGregor and Bennis, 1960), achievement and social recognition. In organizations with highly institutionalized values, socialized individuals restrain themselves from opportunistic behaviour because of their perception that their interests hinge upon those of their organization (Etzioni, 1988, [Drawn from Allaire and Firsirotu, 1993, 2004])

While stewardship theory finds its basic assumptions in the humanistic perspective, the challenge of corporate governance lies, however, in finding the balance between the economic and the humanistic views, and despite the attractiveness and the important role played by the economic perspective in a context of talent mobility, especially at the management level, any swing toward an exclusively economic view will create an organizational culture where utilitarianism and mercenary attitudes will become the norm (Allaire and Firsirotu, 1993; 2004)

2.3.2 Conclusions and implications from the stewardship perspective

Stewardship theory presents a different perspective that complements the simplistic, instrumental and monitoring view by which agency theory deals in regard to board role within the corporate governance system. Though stewardship theory is

not a superior or an alternative theory to the agency perspective in solving the governance problems, it adds a human dimension that allows corporate governance to capture the complex realities of organizational life. Furthermore, it attributes to directors a more active and strategy oriented role, and suggests the use of collaborative mechanisms to complement and avoid the domination of self-reinforcing, dysfunctional control-oriented approaches. It also departs from the passive and negative view of the managerial hegemony view, and takes a middle course between the agency and managerial theories' positions in regard to board roles and directors' degree of activeness.

Thus, inviting Directors and management to work in a collaborative structure- in which mutual respect, constructive dialogue and shared responsibility are preponderant- would lead to superior performance, and will alleviate the governance problem of the modern corporation. However, excessive collaboration and insider domination should not invade control and corrective intervention that outside members and other governance mechanisms aim to provide, and vice versa. Indeed, Westphal (1999) has clearly showed that working collectively with management in setting firm strategy did not compromise directors' monitoring effectiveness.

Furthermore, there is a growing need to integrate several theoretical lenses to enrich the corporate governance field and to capture the complexity of modern corporations (Eisenhardt, 1989; Demb and Neubauer, 1992; Hillman and Dalziel, 2003; Bouzinab, 2005; 2007; Anderson et al, 2007). Thus, complementing the agency control perspective by the stewardship concept of collaboration, respond partially to these calls.

2.4 Resource dependence theory:

2.4.1 Literature review and previous research: Board of directors as a boundary spanning mechanism

The organizational perspective, in which the resource dependence theory is rooted, considers firms as "*a coalition of vested interests*" (Cyert and March, 1963), and their objectives and strategies as an outcome of bargaining processes that

involve firms' internal and external actors (Emerson, 1962; Thompson, 1967; Andrews, 1971; Klein, 1982; Pfeffer and Salancik, 1978).

Drawing on the contingency school (Thompson, 1967; Lawrence and Lorsch, 1967), Pfeffer (1972) considered Board composition and size as organizational response to firm's external environment, while Pfeffer and Slancik (1978) viewed board of directors as a linking and resource co-opting mechanism used by firms to rationally manage their environmental interdependencies, and to enhance their external power.

Resource dependence is, therefore, an externally oriented perspective concerned with the problem of environmental uncertainty and connections (Clarke, 2004). In this tradition, directors serve as boundary spanners, and contribute to reduce firm environmental uncertainty and transaction costs (Hillman et al, 2000; Hillman and Dalziel, 2003) by linking the firm to its external constituents, particularly those possessing critical resources for its survival (e.g. financial capital, raw materials, information about the general environment, technology...etc.), or those having a significant influence on its environment or activities, especially when the firm is seeking legitimacy, political support and reputation. In addition to their contribution in reducing firm uncertainty, directors provide the organization with other valuable resources such as skills, specialized and general expertise, strategic and functional advice, working knowledge and alternative points of view (Pfeffer and Slancik, 1978; Mizruchi, 1983; Hillman et al, 2000; Baysinger and Zardkoohi, 1986; Johnson et al, 1996).

However, early theorists from the resource dependence perspective have considered boards as instruments that support managers in running the firm's activities (Pfeffer, 1972), and at best, as resources at the disposal of managers to reach some valuable inputs for the firm (Pfeffer and Slancik, 1978).

Recently, several researchers attempted to transcend the instrumental and passive views of boards- including those portrayed by the agency theory, the early resource dependence theorists, and the management hegemony perspective- by

asserting that directors should provide more than passive advice and counsel on firm strategy (Hillman and Dalziel, 2003), and should play a more active role in strategy formulation (Zahra and Pearce, 1989). Other scholars (McNulty and Pettigrew, 1999; Pye, 2001; Stiles and Taylor, 2001) proposed that boards should be actively involved in shaping the context of strategy (i.e. conditions of the strategy process), its conduct (i.e. strategy development processes), and its content (i.e. challenging management propositions, evaluating alternative course of actions and monitoring the implementation of strategic decisions).

Finally, and despite the importance accorded to the resources brought by directors, the main limitations of the Resource dependence theory remain its lack of providing or conceptualizing the processes and strategies by which the firm ensures that its board resources are efficiently used to improve performance through environmental linkages; and the overlooking of power dynamics between the board and management, (Zahra and Pearce, 1989).

2.4.2 Conclusions and implications from the Resource dependence perspective

Resource dependence theory provides a more contingent and environment-oriented view of corporate governance, which the other perspectives have largely overlooked. Indeed, Agency theory recognizes that board members bring expertise to the firm decision making processes, but it remains highly focused on the decision control skills and how to use them, internally, in order to formally monitor management activities. However, the overemphasis of agency theorists on the concept of board independence, measured by the outsiders/insiders proportion, has largely shadowed the contribution of knowledge, experience, relationships and other resources that directors bring to the firm. Stewardship theory is almost internally oriented, and it supposes that inside directors' knowledge and their experience with firm activities are valuable resources to be used in the strategy making process. Thus, boards dominated by insiders are more effective and, through collaboration, it would lead to superior firm performance.

Resource dependence brings, therefore, an additional insight on corporate governance by highlighting the firm environmental uncertainty and its impact on board composition and structure. It underlines, also, the implications of board resources in terms of access to external inputs, information and legitimacy as mechanisms used to reduce uncertainty and to ensure firm survival, growth and power. Finally, it emphasizes the importance of external resources, such as the relevant functional and working knowledge, or a particular expertise that outsider directors bring to the firm.

Though, Resource dependence theory failed to describe how this resources are selected and used through dynamic processes to enhance firm strategy, and subsequently, firm performance.

2.5 Institutional and Stakeholders theories

2.5.1 Literature review and previous research: Board of Directors as Institutional Agents

Institutional theory was originally interested in studying the effect of the broader institutional environment on the organizational structures and processes (Selznick, 1949; Zucker, 1987). However, it has evolved in different directions to give birth to several perspectives embedded in what is now known as the *old*, the *new* and the *neo*-institutionalisms, with several ramifications in sociology, economics and political science traditions. Thus, In the economics and organization fields, Coase's concept of transactions costs and its extension by Williamson (1975) or Simon's concept of organizations as means to reduce the effects of cognitive and informational constraints of their actors are all rooted in the neo institutional perspective (Fligstein and Feeland, 1995; Scott, 2001).

While old institutionalists emphasized the importance of influence, values, coalitions, power and informal structures (Selznick, 195), neo-institutionalists went beyond these aspects by integrating the analysis of meaning, symbolic and governance systems as well as regulatory and formal processes within a given organizational field (Scott, 1994; Greenwood and Hinings, 1996).

The institutional theory of action, derived from the neo-institutional theory, is more concerned with the effect of institutionalized rules on organizational actions and decisions (Ocasio, 1999; March and Olsen, 1989; March, 1994) and while drawing on the Giddens (1984) concept of structuration, Ocasio (1999) have reported evidence on the heavy reliance of board of directors on formal and informal rules, firm history and past precedents to define their behaviour and to guide their decisions. However, other scholars have noted that systematic reliance on rules and past precedence may lead to the routinization of governance processes and become, therefore, a source of organizational inertia (March and Olsen, 1989).

Moreover, Judge and Zeithaml (1992) argued that board involvement in strategy making processes was partially affected by external pressures that emanated from their institutional environment. They found that a low level of diversification allowed more space for isomorphism (DiMaggio and Powell, 1983), while at higher levels, diversification tended to dilute the effect of isomorphic behaviour by lowering external pressures for conformism, enabling, therefore, the adoption of distinctive and innovative practices.

Carpenter and Westphal (2001) used a sociocognitive perspective to assess the effect of interlocking directorates, director's social structural context and social interaction on directors' knowledge structure and their ability to effectively participate in firm strategy making processes. They found that the effect of social contexts on firm behaviour, advanced by institutional theorists, was overestimated and that this effect is actually moderated by the firm strategic context (measured by the degree of stability, uncertainty and strategic change of the firm's competitive environment). Accordingly, appointments on the board of directors of individuals exercising executive functions on other firms, or are members of other companies' board of directors facing similar strategic contingencies, will provide the focal firm with relevant strategic information, expertise and knowledge and will contribute to enhance firm corporate governance processes through board involvement and firm strategic effectiveness. In addition, relevant social or relational capital, defined as a set of resources embedded within, or derived from social networks (Nahapiet and Ghoshal, 1998; Hillman and Daziel, 2003), enable directors to provide relevant advice

and counsel on firm strategy and to contribute in improving firm performance (Westphal, 1999).

For the Stakeholders theory, whose propositions are highly intertwined with both the resource dependence and the institutional theories, Boards should reflect stakeholders' interests in corporate governance and policy decision making (Jones and Goldberg, 1982). Thus, Directors appointed by several stakeholders are supposed to review firm's compliance with regulations, evaluate corporate donation policies, and address ethical and other social issues (Cochran and Waddock, 1988). Stakeholders' representation on corporate boards could also be used as a symbolic strategic response to institutional pressures, in order to reconcile conflicting institutional demands, or uncertain technical capabilities (Luoma and Goodstein, 1999). Thus, Stakeholder theory, in regard to board of directors' role, is highly related to institutional and resource dependence theories in terms of firm legitimacy, and the integration of stakeholders' interest into corporate governance concerns (Luoma and Goodstein, 1999).

Furthermore, normative and moral values such as integrity, fairness, and transparency could be infused in the company through the stakeholders' representatives in the boardroom, while Boards could institutionalize their involvement in strategy making processes, by promoting norms and cognitive representation and by identifying them with the interests of the organization (Gopinath et al, 1994).

2.5.2 Conclusions and implications from the Institutional and Stakeholders Perspectives

The Institutional perspective gives us an interesting insight on how firm's broader environment may affect firm corporate governance, board composition and directors' roles. The literature review presented in the precedent section highlighted several aspects to be considered when analyzing board of directors' enabling and constraining factors that enhance or reduce board activeness and involvement in strategy making processes. The extent of the reliance on formal and informal rules,

their adoption and diffusion, firm diversification, organizational age and historical precedents, the strategic context of directors' appointments, the relevancy of interlocking directorates and the social capital of individual board members are all significant aspects that may affect board effectiveness and its contribution as an active and dynamic component of the firm corporate governance system.

2.6 Resource-Based View theory

2.6.1 Literature Review and Previous Research: Board of Directors as Valuable Resources and Governance Processes as Dynamic Capabilities

From a Resource Based perspective, firms are collections of specific, tangible and intangible resources or assets accumulated through firm past decisions and actions (Wernerfelt, 1984, Peteraf, 1993; Teece et al, 1997). The Resource based view (RBV) considers that firm sustainable competitive advantage results primary from the possession of specific, valuable, imperfectly mobile and costly to reproduce key resources (Wernerfelt, 1984; 1989; Barney, 1986; 1991; Rumelt, 1987; Conner, 1991). Thus, firms' heterogeneity results from the specificity of their resources and history, while competitive advantage results from market imperfections, information asymmetries or/and the ability of firms to access and secure, over time, valuable resources that are not available or difficult to replicate by their rivals. The RBV rejects, therefore, the assumptions of perfect information, resource mobility or divisibility and discards firm homogeneity and the absence of above average rents that result from equal access to resources and information under perfect competition (Conner, 1991).

The RBV literature puts forward several concepts that are sometimes used interchangeably, such as resources, tangible and intangible assets, capabilities, and core competences. However, some authors (Amit and Shoemaker, 1993; Dosi et al, 2000, Dierickx and Cool, 1989) insisted on distinguishing between resources, capabilities and competences. *Resources* are generally defined as available tangible and intangible factors, such as patents and licences, in addition to financial and physical assets or human capital owned or controlled by the firm (Grant, 1991; Amit

and Shoemaker, 1993). *Capabilities* refer, on the other hand, to the firm ability in performing a particular task or activity through specific and conscious action (Helfat et al, 2007; Dosi et al, 2000), or the ability to deploy a combination of resources through the use of organizational processes (involving both its cultural and structural components) in order to achieve a given end (Amit and Shoemaker, 1993; Collis, 1994). *Capabilities* are, thus, usually operational in nature and are generally developed in firm functional areas.

At higher corporate levels, capabilities result from the combination of physical, human, technological and reputational resources developed over time (Amit and Shoemaker, 1993; Winter, 2003; Conner, 1991). In addition, Dosi et al (2003) argued that routines and resources, when deployed in a given context, constitute the building blocks of capabilities. *Capabilities* are, therefore, not *things* but *ways of doing*, or *properties of collective knowledge that we recognize through action* (Dosi et al, 2003). Finally, for Wheleen and Hunger (2005: 106), capabilities rely on the firm ability to exploit its resources.

Although the resource based view scholars use the terms *Competence* and *Capability* interchangeably (Prahalad and Hamel, 1990; Hamel and Prahalad, 1992), some researchers called for a distinction between the two concepts (Stalk et al, 1992). Thus, for Marino (1996), *competences* result from firm specific technologies and production skills, while *Capabilities* are the result of firm specific processes and business routines. *Capabilities* involve therefore the interactions of individuals and firm structural and cultural components, and are complex and difficult to imitate phenomena (Marino, 1996). *Competences* refer to the firm ability to deploy combinations of its specific resources to achieve a given task (Teece et al, 1997; McGrath et al, 1995). Thus, competences are generally based on a technological foundation, and are functional in nature, while *Capabilities* are not necessarily built on a technological base, and are more rooted in organizational processes and practices.

Far from being exhaustive in reporting all the variations in definitions and the implications of the debates that the concept of *Capabilities* has sparked off within the

strategy field in general, and the RBV literature in particular, and which goes beyond the main objective of the present study, we retain for the purpose of our thesis, that capabilities are more organizational in nature, and that they tend to encompass resources, organizational components (both structural and cultural), processes, routines and information flows. Furthermore, capabilities could be recognized through firm specific actions and behaviour and tend to be developed over a long period of time.

However, firms tend to evolve in constantly changing environments, especially their market environment, and should continually adapt, renew and reconfigure their resources, competences and capabilities in order to match these changes (Teece et al, 1997; Grant, 1996; Eisenhardt and Martin, 2000; Zollo and Winter, 2001), and continuously create a series of new temporary advantages (D'aveni, 1994; Eisenhardt and Martin, 2000; Blyler and Coff, 2003). This capacity to alter firm resources, competences and capabilities in order to match environmental change is what the RBV scholars call *Dynamic capability* (Helfat and al, 2007).

Broadly, *Dynamic capabilities* include (1) organizational processes, such as product development, acquisition and resource allocation capabilities (Eisenhardt and Martin, 2000); (2) learned and stable patterns of collective organizational behaviour (Zollo and Winter, 2002:340); and (3) managerial capacity to manipulate, create and extend firm resources and capabilities (Adner and Helfat, 2003; Teece et al, 2002). For Helfat et al (2007: 5), *Dynamic capabilities* derive from "*the patterned experience of individuals involved in the decision making or deployment of the capability*". Furthermore, and according to these authors, Dynamic capabilities could be applied to organizational units, such as a division or a team, as well as to individual decision maker under conditions of change. Thus, Directors' generic, industry or firm-specific skills, experience, knowledge and expertise represent valuable resources that may become sources of firm competitive advantage (Baysinger and Hoskisson, 1990; Castanias and Helfat, 2001; Barney et al, 2001).

Applying the RBV to corporate governance implies, therefore, to make a distinction between firm governance *Resources*, *Competences* and *Capabilities*

(both dynamic and non dynamic). As noted in Chapter 1, a specific application of the RBV concepts is lacking in the corporate governance literature, which requires us to define clearly what resources, competences and capabilities should mean from a corporate governance perspective. Thus, and for the purpose of the present thesis, and in line with the definition adopted by Horner (2006) and Bouzinab (2005, 2006), we define *Governance Resources* as a set of tangible and intangible resources available to perform corporate governance roles.

In the same way as proposed by Horner (2006) and Bouzinab (2005; 2006), *Governance tangible resources* are, on one hand, those that could be identified and observed explicitly and formally, such as governance structures (i.e. board committees or board structural and formal attributes such as board remuneration and financial participation or the extent of linkages and interlocks with other firms) while *intangible governance resources* are, on the other hand, tacitly embedded in governance practices and processes and could not be easily identified or observed but may be inferred through qualitative analysis, such as human capital, relevant experience, knowledge, expertise, reputation and valuable information provided by board members .

Yet, and as discussed earlier, governance resources could not constitute by themselves sources of competitive advantage if they are not combined with, or complemented by governance competences and capabilities. Thus, we define *Governance competences* as the *functional* part of the corporate governance system, which includes the necessary skills to perform the control tasks that the agency theory highlights, such as auditing and financial reporting, hiring and motivating management, compensation setting and other monitoring tasks. *Governance capabilities* refer to the firm specific and difficult to imitate, corporate governance processes and board capacity to use the governance resources and competences available to the firm in order to achieve a competitive advantage by, at least, lowering effectively the agency costs, and ideally by contributing to generate superior economic rents, through directors' active involvement in firm strategic decision making processes (Bouzinab, 2005; 2006). Thus, *Governance capabilities* could be divided in two parts: *Board control capability* and *Board strategic capability*.

We will discuss these capabilities, along with their formal implications for the present study in Chapter 3.

Finally, and given the dynamic environment that firms generally face, there is a need for firms to achieve both technical fitness (i.e. Quality and cost) and evolutionary fitness (i.e. Survival, growth, value creation, competitive and sustainable advantage) (Helfat and al, 2007). In addition, Corporate governance refers to the relationship between the internal management systems and the external environment and their implications in determining firms' strategic directions (Hitt and al, 2003), which allow us to define *Dynamic governance capabilities* as the board capacity to manipulate, create and extend governance resources, *competences* and *capabilities* in order to achieve technical fitness by enhancing the quality of firm corporate governance practices and evolutionary fitness by contributing to create firm value and sustainable advantage extracted from its governance processes.

2.6.2 Conclusions and implications from the Resource Based view theory

The resource based view complements the agency, the resource dependence and the institutional theories by providing additional insights on board roles and functions, and while agency theory is a more control oriented perspective that focuses primarily on internal mechanisms to reduce agency costs by aligning management interest with those of their principals, the RBV complements it by highlighting the critical role of resources that directors bring to the firm, as well as their implications for strategy services provided by boards of directors, and more importantly, their ability to contribute in seeking and generating economic rents.

The resource dependence theory is, though, an externally oriented perspective that highlights the importance of resources and linkages that external directors provide to the firm, and while it failed to explain the mechanisms by which these resources are effectively used and deployed by the firm, the Resource based view provides useful tools to investigate how these resources should be integrated with firm internal resources and processes to form governance capabilities and enhance board activeness in order to become a source of competitive advantage.

Finally, the RBV complements the institutional theory, as in the case of the resource dependence theory, by providing the dynamics by which the resources derived from social networks and relational capital, when combined with firm organizational capabilities, could contribute to avoid isomorphism and to alter governance routines through the firm capacity to implement *otherwise* common governance practices and devices and build a heterogeneous and hard to imitate governance capability that may become a source of firm competitive advantage (Barney et al, 2001).

2.7 The Value creating governance perspective

2.7.1 Theoretical background and main propositions

In order to deal with the shortcomings and the limitations of traditional corporate governance models- such as the fiduciary model (in which good corporate governance is measured through director's independence, the separation of the CEO and the chairman positions along with an active control, by the board, through its auditing and remuneration committees) or the shareholders' rights model (in which good governance is measured by the absence of any impediment or defence against takeovers in order to discipline or/and eliminate incompetent managers through market forces)- Allaire and Firsirotu (1993; 2003; 2004) proposed a value-creating perspective of corporate governance (Figure 2.1).

This approach, being in line with the resource based view and the agency theory, does not reject the monitoring role highlighted by the latter and suggests that boards of directors should be considered further as active and value creating governance mechanisms. Thus, Board *legitimacy* and *credibility* constitute the first pillar of the value creating governance model, while the other pillars refer to the effectiveness of the strategy process and dialogue between board members and management; the quality of financial and strategic information received and reviewed by the board of directors; and finally, an effective and balanced compensation and incentive system.

Allaire and Firsirotu (2003: pp. 122-123) propose, therefore, the concept of a value creating governance, and assert that this perspective shares some of the characteristics of internal governance in diversified corporations and the type of governance adopted by private-equity firms for the privatized firms. They seek to answer the question raised by Jensen and others, that is, how come boards of directors never manage to create the kind of value that private equity firms can extract from companies after their privatization?

Pillar I	Pillar II	Pillar III	Pillar IV
<i>Legitimacy and credibility of principals (board members)</i>	<i>Strategy process, planning, and dialogue</i>	<i>Quality of financial and strategic information</i>	<i>Compensation and incentive system</i>
<p>Legitimate: who do you represent? Who appointed or elected you? What do you have at stake?</p> <p>Credible: do you understand this business, its key drivers of value, its strategic issues? Did you invest enough time and mental energy to gain the respect of management for your understanding and insights about the business? Does management trust you and do you trust management?</p> <p><i>A necessary, but not sufficient, condition for good governance; Weakness here turns the other three pillars into proforma exercises</i></p>	<p>As principal do you get to review and approve the strategic planning process?</p> <p>Does the process include an early discussion of orientations with the board before the strategic plan is finalized?</p> <p>Is there sufficient time allocated to strategic review and discussion?</p> <p>Are key strategic issues reviewed and discussed with management at regular board meetings throughout the year?</p>	<p>Is financial information reliable, valid, and timely?</p> <p>Are significant accounting judgments and treatments well understood?</p> <p>Has the impact of alternative treatments been assessed?</p> <p>Does the board have access to reliable and independent information on competitive position, on client assessment of the company?</p> <p>Are capital investment budgets and acquisition proposals thoroughly reviewed</p>	<p>Has the board set compensation principles and practices that are optimal for this particular company?</p> <p>Are management incentives linked to <i>genuine and durable</i> value-creation?</p> <p>Does the compensation system keep an appropriate balance between short-term and longer-term economic performance?</p>

Source: Allaire and Firsirotu, 2003 (Reproduced with the permission of the authors)

Figure 2.1 The Four Pillars of the value creating governance model.

For Allaire and Firsirotu (2003), the first pillar constitutes a *sine qua non* condition, given that the effectiveness of the other three pillars is largely dependent on the *legitimacy* and the *credibility* attributes of the board members. In line with the agency perspective, *legitimacy* results from an effective and accurate board election processes that provide the firm with motivated directors who are willing to represent the interests of shareholders and to exert their authority to monitor firm top management. According to Allaire and Firsirotu (2009), *Legitimacy* flows from two sources: (1) the independence of directors from management and the existence of a nomination and election process that ensures adequate representation for the organization's stakeholders or all of its shareholders in the case of exchange-listed companies; (2) the existence of important and committed shareholding. For an exchange-listed company, the two forms of legitimacy should be combined, and while significant shareholders, playing an active role in management and governance of the firm, are considered as legitimate board members, their direct participation in the board or its committees should be proportional to the percentage of their equity participation. According to Allaire (2008), in the case of the presence of significant shareholders or their representative in the board of directors or in one of its committees, more than the third of directors should be independent from both management and these significant shareholders and should be elected by the shareholders minority.

Credibility results from board's collective expertise and knowledge that are relevant to the firm industries and businesses, which may require effective training and information programs on specific issues with which the firm should deal, especially in regard of its operations and its business model (Allaire, 2003; 2008, 2009). Thus, a credible director is generally an engaged and respected individual who raises difficult questions during board meetings, and without losing its independence from management, shares his experience with them and offers them counsel (Allaire, 2008). This aspect of the value creating governance approach is supported by the resource based view theory, the resource dependence theory and the socio-cognitive branch of the institutional theory.

While legitimacy and credibility are essential and complementary components for an effective governance system, they remain however independent variables, given that legitimacy tend to give the board the authority to impose its will to management while credibility is the attribute that makes a board more effective and value creating (Allaire, 2008). However, while Board independence is one of the conditions that could ensure board legitimacy, it does not necessarily imply its credibility, which could explain the highly mixed and disappointing results of studies linking board independence with firm performance (Allaire, 2008).

Strategy process and dialogue constitute the second pillar of the Value Creating perspective (Allaire and Firsirotu, 2003; 2004; 2009) and through which directors should, as principals, review and approve the strategic planning process, include in that process an early discussion with management about firm's strategic orientation before the strategic plan is finalized and ensure that sufficient time is allocated to review and discuss firm's strategic issues. While legitimate and credible directors can give full effectiveness to this pillar (Allaire and Firsirotu, 2003; 2004, 2009) we believe that the existence of relevant governance resources and governance strategic capabilities, as discussed in the previous section, will further improve this strategy process and dialogue.

The quality of financial and strategic information is the third pillar of the Value Creating perspective and, through it, directors should ensure the reliability and validity of financial information, show a well understanding of the significant accounting judgement and ensure access to reliable and independent information on competitive position, on client assessment of company's products and services and on employee's perceptions of the company. Under this pillar, directors should also review capital investments, budgets and specific proposals (Allaire and Firsirotu, 2003; 2004; 2009). Here again the effectiveness of this pillar will be ensured by credible and legitimate directors, while governance resources and governance monitoring capabilities will reinforce tasks such as capital investments review, budgets and specific proposals.

A calibrated Compensation and Incentive system constitutes the fourth and last pillar of the Value Creating Perspective by which the board should set compensation principles and practices that are optimal for the company, link management incentives to genuine value-creation indicators and ensure a balance between short-term and longer-term economic performance (Allaire and Firsirotu, 2003; 2004; 2009). Here again, we think that governance resources and monitoring capabilities, such as the existence of an efficient compensation committee with experimented members and well defined processes will enhance this fourth pillar.

2.7.2 Conclusions on the value creating governance approach

Value creating governance approach tackles the fundamental agency problem of the asymmetric relationship between managers and the board of directors, as well as the consequences of the information advantage possessed by management (Allaire and Firsirotu, 2003). While correcting for the flaw of some core agency issues- such as management compensation, shareholders representation and interests, and information asymmetry problems- the value creating governance approach is in line with almost all the theories discussed in the previous sections. Indeed, while the concept of *legitimacy* tends to correct some ill defined aspects of the agency theory's prescriptions, *credibility* encompasses aspects such as directors' knowledge, experience and expertise, which are common aspects found in the resource based theory, the resource dependence theory or the social network and the socio-cognitive branches of the institutional theory. Hence, the concepts of *legitimacy* and *credibility* open the door for potential multi-theoretical integration that would enhance and refine our understanding of the complex nature of modern corporate governance.

Furthermore, the second pillar dealing with strategy processes and dialogue is also in line with the active school of board role in strategy, itself rooted on a multi-theoretical perspective (Hendry and Kiel, 2004; Pearce and Zahra, 1991; Stiles and Taylor, 2001, Judge and Zeithaml, 1992, Donaldson, 1990). Thus, the Value-creating governance does integrate the teachings of several frameworks embedded in most of the theoretical models reviewed in this section.

While the second pillar could be improved by combining governance resources to achieve board strategic capabilities, the two last pillars could be reinforced by relevant governance resources and monitoring capabilities. We will therefore integrate these concepts in the next chapter of the present thesis.

2.8 Chapter Summary and theoretical implications for the present thesis

The literature reviewed in this chapter provides a general assessment of established theories dealing with corporate governance issues, especially those in relation with board of directors' attributes; roles and functions (see Table 2.1).

Although agency theory was the largely dominant perspective during the last decades, it has suffered however from serious flaws associated with some of its core propositions, while its prescriptions failed to capture the complex nature of the corporate governance phenomena. Thus, ill defined concepts, such as *directors' independence* and its *outsiders/insiders* proxy, the overestimated impact of some governance mechanisms, such as, management compensation and the market for corporate control, along with the instrumental conception of the board of directors as a monitoring and disciplining device, have all contributed to dysfunctional and flawed governance systems. Indeed, by heavily drawing on monitoring and control aspects of corporate governance, firms may fall in reinforcing cycles of control oriented governance, which lead to board and management polarization, to the restriction of information flows, to myopic behaviour that impede risk taking and suppress organisational learning, and to clan fights, or impression management (Sundaramurthy and Lewis, 2003).

Furthermore, the agency perspective have largely evacuated the board of directors' potential to contribute in enhancing firm rents (through the resources brought by its members and their contribution to firm strategy making processes) by focusing, almost exclusively, on the agency costs mitigation as the principal output of effective corporate governance systems.

Corporate governance is, however, a complex phenomenon involving resources, actors, relationships, interactions and processes at various internal and

external levels in order to create and sustain firm value and requires, therefore, a multi theoretical conception that accounts for its dynamic and systemic nature. While, on one hand, the agency theory has provided a solid conception and a clear description of the implications emanating from the asymmetrical nature of the relationships between principals and agents, it has generated, on the other hand, only partial and incomplete solutions to overcome these problems.

Stewardship theory provides some useful insights on the strategic role that insiders may play in governance processes, and outlines the need of some collaborative behaviour between directors and managers, however, excessive collaborative behaviour, as promoted by the stewardship theorists, may lead to reinforcing cycles of collaboration oriented governance such as groupthink (Janis, 1982), overconfidence, the discounting of environmental change, complacency, entrenchment behaviour, consensus seeking or higher commitment to irrelevant and suboptimal strategies (Sundaramurthy and Lewis, 2003).

The managerial hegemony theory pointed out some constraints that impede or limit board of directors' activeness, or have a significant influence over firm activities and strategies, such as the selection processes of board members, the relevance of their skills and experiences to firm reality, their motivations and limitations to dedicate more time to firm affairs, their ability to have access to relevant information, their predisposition to shape and use their power sources in a given structural setting, as well as their independence vis-à-vis the CEO and other top managers. However, Managerial hegemony theory remains descriptive and highly deterministic in regard of board-management relationships, and while its proponents seek to prove that management will always have an incontestable advantage over the board of directors, they remain silent about how these disadvantages could be mitigated.

The Resource dependence theory provides an additional insight on corporate governance by taking in consideration the firm environmental uncertainty and its impact on board composition and structure. It also highlights the critical role of resources- such as information, experiences, expertise, advice and linkages- that

directors bring to the firm. However, and as discussed earlier, it fails to describe the mechanisms by which these resources are deployed to enhance firm performance.

The RBV is a more dynamic approach that complements the resource dependence and the institutional theories by providing tools for understanding how the external resources brought by directors could be integrated with firm internal resources and processes to form governance capabilities and to enhance board active role as a source of competitive advantage. The RBV complements also the other theories by considering rents seeking, in addition to the agency costs mitigation highlighted by the agency theories, as an important function of the board of directors that may significantly contribute in achieving superior competitive advantage.

The Value Creating Governance aims to correct the pitfalls of corporate governance orthodoxy created by the implementation of improper and context-detached solutions that emanated from flawed and ill conceived agency prescriptions, and raises the critical importance of *legitimate* and *credible* boards as the foundation of any effective governance system. It complements also the other perspectives by providing a sound theoretical model that integrates the internal and external realities of the firm, the importance of both the monitoring and service tasks of boards, along with the mechanisms that ensure an effective use of governance resources and capabilities through pertinent strategy making processes, information gathering and balanced incentive systems.

It becomes clear from this literature review that corporate governance could not be approached by a one dimensional perspective or a single theory, and that the integration of several perspectives will provide a more realistic view of how corporate governance and board of directors could make a significant contribution in improving firm performance.

As discussed in chapter 1, the present thesis uses M&A as a context for studying the impact of board of directors on firm performance. Therefore, a review of the literature on M&A through the lenses of the economic, strategic, financial, and

organizational perspectives will be presented in chapter 3. An integrated theoretical framework that formally links the research questions and hypotheses to some significant aspects derived from the theories of corporate governance discussed in the present chapter will be also developed in the next chapter, especially, the governance attributes that could have a significant impact on the M&A success or failure.

Table 2.1: Summary of Board of directors' conceptions and theories discussed in Chapter 1

	Agency Theory	Stewardship Theory	Resource dependence Theory	Institutional theory (Sociocognitive and Social networks theories)	The Resource Based View theory	Value creating governance perspective
Board roles and main functions	<ul style="list-style-type: none"> • Monitor management and firm strategy • Evaluate, management performance • Protect Shareholder interests • Hire and fire management • Provide fiduciary information on firm activities and performance 	<ul style="list-style-type: none"> • Advice and Counsel • Facilitate manager's decision • Collaborate with management • Enhance involvement and trustworthy relations 	<ul style="list-style-type: none"> • Resource provider (Including information, advice and counselling) • Connect the firm with other organizations (boundary spanners) 	<ul style="list-style-type: none"> • Respond to firm institutional pressures and ensure firm legitimacy • Infuse values through governance practices (i.e. Integrity, transparency, fairness...etc.) • Institutionalize board involvement in strategy making decision 	<ul style="list-style-type: none"> • Provide valuable knowledge, experience and specific expertise • Provide hard to imitate services and contributions • Build governance competences and capabilities 	<ul style="list-style-type: none"> • Represent shareholder or significant stakeholder interests • Generate constructive strategic dialogue between the board and the management • Design governance information systems • Set compensation and incentive systems for management

<p>Firm context and environment</p>	<ul style="list-style-type: none"> • Market competition as a control mechanism • Market for corporate control as a governance mechanism • Second choice alternatives when internal mechanisms fail 	<ul style="list-style-type: none"> • Remove external ambiguity about the responsibility on firm processes 	<ul style="list-style-type: none"> • Access to external Resources • Relevance of strategic context of director's appointment and firm environment 	<ul style="list-style-type: none"> • Considers firm regulatory and social contexts • Highlights the impact of informal rules 	<ul style="list-style-type: none"> • Technical and evolutionary fitness • Match governance resources and capabilities to firm environment 	<ul style="list-style-type: none"> • Governance mechanisms, such as management compensation should be tied to firm specific contexts • Directors should possess pertinent experience and extensive knowledge on firm industries and markets
<p>Link to performance</p>	<ul style="list-style-type: none"> • Reduce agency cost by aligning the interests of management and shareholders • Inconclusive and mixed empirical support 	<ul style="list-style-type: none"> • Unified firm leadership • Remove internal and external ambiguity • Self-reputation pushes management to seek high firm performance 	<ul style="list-style-type: none"> • Provision of resource (Reduce dependency, uncertainty and transaction costs) • Improved monitoring and advising roles which enhance board contribution to strategic decision making and , therefore, enhance firm performance 	<ul style="list-style-type: none"> • Knowledge and experience derived from directors' social interactions enable board active involvement in firm strategy making, which would contribute to improve firm performance 	<ul style="list-style-type: none"> • Board and governance capabilities as a source of competitive advantage • Enhance firm rents through dynamic and active involvement in firm strategy making 	<ul style="list-style-type: none"> • Get management to achieve results through an effective system of checks and balances • Access to independent, timely and accurate information will improve corrective actions and contribute therefore, to improve firm performance

<p>Antecedents and premises</p>	<ul style="list-style-type: none"> • Firm as a nexus of contracts • Conflicting interests • Asymmetrical relationships • Management information advantage and opportunism • Behaviour or outcomes based contracts as dependent variables • Incentives (equity compensation) • Directors Independence • Focus on external rewards for management (tangible, commodity exchange) 	<ul style="list-style-type: none"> • Trust and reliance • Cooperative behaviours • Collective action • Personal interests are subordinated to organizational ones • Focus on intrinsic rewards (achievement, affiliation, self-actualization) 	<ul style="list-style-type: none"> • Firm as a coalition of vested interests • Firm survival and growth is function of its access to critical resources • Boards reflect firm institutional environment • Directors are tools used by managers to access valuable resources and to reduce uncertainty and manage their external interdependencies 	<ul style="list-style-type: none"> • Organizations are affected by their environments • Formal and informal rules influence the behaviour of firm actors • Historical precedents influence firm present decisions 	<ul style="list-style-type: none"> • Directors bring tangible and intangible governance resources • Governance resources are heterogeneously distributed across firms • Board configuration and diversity could constitute an hard to imitate governance resource base • Governance and Board practices and capabilities could constitute a source of competitive advantage 	<ul style="list-style-type: none"> • Board face similar issues than those faced by corporate offices of diversified firms • <i>Legitimate and credible</i> directors are sine qua non to other governance practices and mechanisms • <i>Credibility is the joint product of competence and trustworthiness</i> • Board should add value and not merely fulfill its fiduciary role
<p>Antecedents</p>						

and premises					<ul style="list-style-type: none"> • Governance dynamic capabilities could constitute a source of sustainable competitive advantage in changing environments 	
Nature of the resources provided by directors	<ul style="list-style-type: none"> • Ability to control and evaluate management 	<ul style="list-style-type: none"> • Ability to coach and counsel management 	<ul style="list-style-type: none"> • Financial capital • Information • External ties and networking with external organisations • Improve Relations and links with important external actors • Legitimacy 	<ul style="list-style-type: none"> • Relevant knowledge and experience when directors face similar contexts through their interlocking appointments • Information and best practices • Advice and support 	<ul style="list-style-type: none"> • Knowledge • Experience • Specific expertise • Monitoring and strategic skills • Linkages and access to financial capital • Managerial competence • Innovative 	<ul style="list-style-type: none"> • Knowledge • Experience • Information • Specific and general expertise • Informed judgment

Nature of the resources provided by directors					governance practices	
Board participation in strategy making decision and processes	<ul style="list-style-type: none"> • Ratifying • Monitoring 	<ul style="list-style-type: none"> • Participate actively in strategy formulation • Assist managers in defining the organizational objectives 	<ul style="list-style-type: none"> • Service and counsel • Support management • Mixed opinions about Board active involvement in firm strategy making processes 	<ul style="list-style-type: none"> • Service and counsel • Participate actively in strategy making 	<ul style="list-style-type: none"> • Participate actively in strategy formulation • Add dynamic and hard to imitate capabilities to firm strategy making processes 	<ul style="list-style-type: none"> • Include discussions on strategic orientations • Early involvement in firm strategic dialogue • On-going dialogue during strategy implementation
Limitations	<ul style="list-style-type: none"> • Instrumental conception of directors (information device) • Focus on the monitoring function of Board and agency costs reduction • Generic prescriptions that underestimate Contingencies and firm 	<ul style="list-style-type: none"> • Role confusion (CEO/Chairman and management/Board of directors) • Overestimated impact of management self-control • Internal focus 	<ul style="list-style-type: none"> • Instrumental view of directors (used by managers to access critical resources) • Underestimates power dynamics between the board and management 	<ul style="list-style-type: none"> • Overestimates the effect of the social environment on firm organizational and governance processes • Firm Determinism 	<ul style="list-style-type: none"> • Confusing terminology (resources, competences, capabilities) • The link between the concept of Competitive advantage and firm 	<ul style="list-style-type: none"> • Require changing in corporate laws and board culture.

Limitations	specific contexts and led to counter-productive effects		<ul style="list-style-type: none"> Lack to provide the mechanisms by which resources are internally used to reduce firm uncertainty 	and conformism <ul style="list-style-type: none"> Overestimate the effect of isomorphism on firm organizational and governance practices 	performance is unclear <ul style="list-style-type: none"> Capabilities are difficult to identify and measure 	
Key authors	Jensen and Meckling, 1976; Arrow, 1985; Pratt and Zeckhauser, 1985; Eisenhardt, 1989; Mizuchi, 1983; Mace, 1971; Walsh and Seward, 1990; Demsetz and Lehn, 1985; Conyon and Peck, 1998; Weisbach, 1988; Johnson et al, 1996	Donaldson, 1990; Donaldson and Davis, 1991; Davis et al, 1997; Sundaramurthy and Lewis, 2003; Shen, 2003	Pfeffer, 1972; Pfeffer and Salancik, 1978; Hillman et al, 2000; Hillman and Dalziel, 2003; Carpenter and Westphal, 2001	Selznick, 1949; Zucker, 1987; Ocasio, 1999; March and Olsen, 1989; March, 1994; Judge and Zeithaml, 1992; Dimaggio and Powell, 1983; Carpenter and Westphal, 2001; Nahapiet and Goshal, 1998;	Wernerfelt, 1984; Peteraf, 1993; Teece et al, 1997; Barney, 1986; 1991; Rumelt, 1987; Conner, 1991; Amit and Shoemaker, 1993; Dosi et al, 2000, Dierickx and Cool, 1989; Helfat et al,	Allaire and Firsirotu 1993; 2003; 2004; 2009); Allaire, 2006; 2008

Key authors				Hillman and Daziel, 2003; Cochran and Watrick, 1988	2007; Dosi et al, 2000; Grant, 1996; Eisenhardt and Martin, 2000; Zollo and Winter, 2001; Castanias and Helfat, 2001; Barney et al, 2001	
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CHAPTER III

THEORETICAL DEVELOPEMENT AND HYPOTHESES: M&A CONTEXT AND BOARD OF DIRECTORS' CAPABILITIES EFFECT ON FIRM PERFORMANCE

The main objective of this chapter is to develop a conceptual model showing how board of directors monitoring and strategy making competences, when combined with other governance resources, could become a corporate governance capability and how this capability could contribute to firm performance.

Thus, we will begin with a brief literature review on M&A's types, motives and expected outcomes, followed by the development of hypotheses derived from the board of directors implication in M&A decisions, and end with a conceptual model of how board of directors' capabilities, as part of the firm acquisition dynamic capability, affect the post-acquisition performance. As explained in section 1.3 of the present thesis, M&A contexts provide an interesting setting to assess the effects of governance resources, along with board monitoring and strategy making capabilities, on firm performance and present, therefore, a unique opportunity to integrate some significant aspects of board multifaceted roles and tasks provided by the Agency theory, Stewardship theory, Resource dependence and Institutional theories, as well as the Resource Based View.

Given that the Value Creating Governance perspective (see Table 2.1) integrates several aspects that stem from the other theories, we will mobilize the four pillars discussed in chapter 2 to assess how Board *legitimacy* and *credibility*, *strategic processes* based on relevant strategic governance resources and capabilities, efficient use of *financial and strategic information* and a *calibrated compensation system* based on relevant monitoring governance resources and capabilities could enhance the firm ability to select successful acquisitions.

3.1 Mergers & Acquisitions: Theoretical Perspectives, Types and Motives

Mergers and Acquisitions (M&A) have been performed by companies for more than a century as means to achieve operational and resource allocation efficiencies, strategic fit and economic growth (Sudarsanam, 2003; Gaughan, 2005). Since the M&A transactions affect, in addition to the involved firms, a wide range of socio-economic actors such as workers, managers, competitors and communities, they became a center of greater interest in the economic, legal, financial, organizational and strategy fields, and they sparked off a huge volume of academic research, regulatory measures and practical approaches crafted and marketed by consulting firms.

Although some authors differentiate between *Mergers*, *Acquisitions* and *Takeovers*, these terms are generally used interchangeably (Weston et al, 1998; Sudarsanam, 2003; Gaughan, 2005). For instance, Sudarsanam (2003: 2) defines *Merger* as the operation by which corporations combine resources to achieve common objectives and where shareholders of the combined firms remain joint owners, while *Acquisitions* refers to the purchasing by an acquiring company of the assets or shares of a target, which generally becomes the subsidiary of the acquirer. Other authors define *mergers* as negotiated deals between friendly parties who arrive to a mutually agreed combination of their firms, while *takeovers* or *tender offers* refer generally to a hostile situation in which the raider makes a direct and not solicited offer to the target's shareholders, bypassing, therefore, its management and its board of directors (Weston et al, 1998; Gaughan, 2005). For Larsson (1990) and Jensen (1985), M&A refer to the joint agreement between two merging firm's management, submitted to their shareholder approval, and to all other publicly announced takeover bids (i.e. hostile). For the purpose of the present thesis, M&A, acquisitions, mergers and takeovers will be used interchangeably.

Research in the field of M&A involves many aspects such as their typology, the motives behind them, their effect on firm performance and on the economy in general, their historical evolution and the determinants of their success and failure.

These aspects were investigated from different theoretical lenses, grounded in different disciplines such as economics, finance, organization theory and strategy. In the remaining part of this section, we will briefly review the literature on the types and motives behind M&A, mainly, those grounded in the economics and the strategic management fields. Indeed, and given that the Organizational perspective is generally interested on the integration aspects of M&A, rather than its motives and types, it turns out to be more relevant to integrate it within section 3.2 of the present thesis. Finally, the financial perspective and its implication for M&A will be also discussed in section 3.2, while the aspects of corporate governance and board of directors' roles will be discussed in section 3.3.

3.1.1 The economic perspective of M&A

The economic perspective suggests that the rationale behind M&A has to do with the pursuit of cost optimization and Market power (Goldberg, 1983; Ravenscraft and Sherer, 1987; Seth, 1990; Sudarsanam, 2003). Thus, firms engage in M&A to gain a competitive advantage over their rivals by reducing their costs, or/and increasing their market power. Cost reductions come under the form of *economies of scale* and/or *scope*, while *Market power* is achieved when a firm enhances its influence on prices and profits by imposing and sustaining a less competitive structure within its industry.

Economies of scale refer to the cost reduction that stems from spreading a substantial production or distribution fixed costs component over a large volume of outputs. Although economies of scale are generally depicted as any cost reduction realized from increasing the volume of production or distribution, these economies should be, however, reserved only to situations in which a comparison of average unit cost of two systems having different capacities, and operating at their minimum efficient scales is possible (Allaire and Firsirotu, 1993; 2004). The level of economies of scale results, therefore, from the difference between the respective average unit costs of two systems having different production and distribution capacities, and functioning at their respective minimum efficient scales, which is different from the situations in which cost reductions result from the mere increase of volume that is

achieved to meet an already existing size and capacity (Allaire and Firsirotu, 1993; 2004). Thus, economies of scale refer to the reduction in per-unit cost resulting from an increase in the size or the scale of a company's operations (Gaughan, 2005).

As an alternative to organic growth, M&A provide, at least theoretically, the increase in scale that is needed to reduce average cost units by combining the assets and capabilities of the acquirer and the target in order to reach a larger volume of output over which the unit fixed costs components could be spread, which will result in a dramatically and rapidly reduced cost per unit.

Economies of Scope refer generally to those situations where the total cost of producing and selling two or more products or services by a multi-product firm is less than the cost of these products when produced and sold separately by specialized individual firms (Seth, 1990; Sudarsanam, 2003; Allaire and Firsirotu, 1993, 2004). Economies of scope are also possible when the firm possesses resources and capabilities, including tangible and intangible assets, located within or across the components of the firm value chain, and which could be applicable on several firm's products, services or/and geographic markets (Teece, 1982; Farrel and Shapiro, 2001; Johnson et al, 2005; Allaire and Firsirotu, 1993; 2004; Sudarsanam, 2003; Wernerfelt, 2005). The concepts of economies of scale and scope provided the logic behind many related diversification pursued through M&A operations.

However, as sound as these economic rationales may appear, the ultimate success of M&A operations motivated by economic reasons, doesn't reside only in the acquirer's ability to select targets and make deals that have a potential of scale and scope economies, it requires, also, integration and organizational skills, in order to actually extract these benefits (Allaire and Firsirotu, 2001).

Drawing on the costless nature of the price mechanism proposed by Coase (1937), Transaction Costs Economics (TCE) contends that markets and firms are alternative coordinating methods of production (Coase, 1937). This proposition provided the ground for the concept of vertical integration as a mean to replace costly buying and selling operations. Williamson (1971; 1975), considers vertical

integration as *make or buy decisions* by opposing markets to hierarchies as alternatives solutions adopted in function of the firm asset specificity, uncertainty and frequency.

Make decisions imply that the firm seeks to transform costly buyer or seller relationships (i.e. characterized as market failure) by integrating them under its control through *vertical integration* in order to achieve cost optimization through the enhancement of technical and/or coordinating efficiencies, which could result in the raising of entry barriers for potential competitors (Sudarsanam, 2003).

However, intensive vertical integration could lead to complexity costs that may cancel out the benefits of such operations, especially when the management of the acquiring firm lack organizational and integration skills and experience (Allaire and Firsirotu, 1993, 2001, 2004). These complexity costs find their roots in cultural differences between the acquirer and the target; in the existence of internal agency problems; in coordinating and control devices to be set in order to manage a more sizeable structure; in the existence of opportunistic behaviour that may lead to unbiased performance evaluation or problematic internal transfer prices, or simply, because the acquirer's management failure in rapidly and efficiently integrate the operations of the acquired entity within the already existing structure (Allaire and Firsirotu, 1993; 2004).

Horizontal mergers refer to the combination of firms operating and competing in the same kind of business activity (Weston et al, 1998) which generally occur in deregulated or consolidating industries (Gaughan, 2005) or in those facing mature or declining lifecycle stages (Sudarsanam, 2003). *Related mergers* fall also under the Horizontal M&A and refer to situations in which the merging companies are producing and selling products that are not similar in their end or use, but share in common their distribution channels, R&D capabilities, technology, branding, geographical markets, or market segments (Allaire and Firsirotu, 1987; Sudarsanam, 2003). Weston et al, (1998) consider related mergers as a special form of *Conglomerate merger* and refer to them as *concentric mergers*.

Pure Horizontal mergers refer to the combination of two direct competitors producing and selling similar products and are primarily motivated by scale economies and market power (Weston et al, 1998; Sudarsanam, 2003), particularly when firm's industry is in a mature or declining stage and where production capacity excess becomes significant due to decreasing demand, technological change, deregulation or ongoing global competition (Jensen, 1993).

Horizontal mergers are, therefore, generally motivated by scale and/or scope economies and by revenue enhancement through firm capabilities' leverage (Sudarsanam, 2003).

Finally, *Conglomerate mergers* refer to the combination of two non competing firms, operating in unrelated businesses and having no buyer or seller relationships within a similar industry value chain (Weston et al, 1998; Gaughan, 2005). This type of M&A are generally motivated by financial or business risk diversification and by the economic benefits that could be achieved through a synergetic corporate headquarter that provides the individual operating divisions with generic functional and managerial expertise, along with financial flows of funds (Weston et al, 1998; Allaire and Firsirotu, 1993; 2003).

3.1.2 The strategic perspective of M&A

Discussing M&A under the strategic perspective commands a brief discussion on the dominant theories in the strategic management field. Given that the research on the strategy field has been traditionally divided between its *content* and its *process* components (Schendel and Hofer, 1979), this section focuses on the *Content*, rather than the process component of strategy.

The S-C-P paradigm and the Resource Based View are the major theoretical perspectives that significantly and permanently influenced the strategy field since its emergence during the 1970's. We will present therefore a brief review of these two perspectives along with their direct implications for the M&A's operations. Although Organizational economics, such as TCE and the agency theory have also exerted

some influence on the strategy field (Hoskisson et al, 1999), these theories will not be discussed in this section. Indeed, we found it more salient to discuss TCE and its implications for M&A in the previous subsection under the economic perspective, while the agency theory's implications will fit better within section 3.3 presented hereafter.

According to Hoskisson et al (1999), While early strategy researchers (e.g Chandler, 1962; Andrews et al, 1965; 1968; Ansoff, 1968) were interested in the internal aspects and the best practices that lead to firm success, the Strategic management field was, however, highly influenced by the economic perspective, particularly through the Industrial Organization (IO) economics during the early 1970's until later in the 1980's. IO economics trace its roots in the Structure-Conduct-Performance (S-C-P) paradigm proposed by Mason and Bain (1956, 1968) and its focus was essentially directed on the industry and the competing groups of firms considered as its central units of analysis (Hoskisson et al, 1999).

Being fundamentally deterministic, the S-C-P paradigm implies that firm performance is dictated by its industry structure and that firm behaviour (i.e. conduct or strategy) is constrained and highly influenced by its industrial environment (Porter; 1981). Hence, Structural analysis, especially the popular five forces model, assumes that competitive advantages come from firms' positions and differentiation abilities within a given industry, in which the five forces determine the rules of competition and, therefore, the best positioning and differentiation possibilities (Porter, 1980; 1985). Put simply, firm performance and competitive advantage are more affected and better explained by its industry structure than by its conduct, actions or resources.

Therefore, the S-C-P perspective considers M&A as a mean by which firms could improve their market position or differentiate themselves by turning the five forces (i.e. threat of new entrants, supplier bargaining power, threat of substitutes, buyer bargaining power and level of competition) into their advantage and by gaining competitive advantage through cost leadership or product differentiation, under/or without segment focus (Porter, 1985). Thus, to reduce supplier or buyer bargaining

power, firms could perform *Vertical M&A* (by transforming supplier or buyer relationships into hierarchical ones) or *Pure Horizontal Merger* (by enhancing its purchase power through larger volume or its market power through reduced competition or substitutes). *Pure Horizontal M&A* that provide substantial economies of scale could also neutralize the threat of new entrants by shaping higher barriers of entry.

Critics of the S-C-P paradigm argue that inter-firm heterogeneity within industries explains firm performance better than industry membership (Rumelt, 1991; Roquebert et al, 1996). Revived by Wernerfelt (1984), firm internal resources received a huge interest within the strategic management field, especially when these resources were considered as a source of competitive advantage and firm performance. Resources' contribution to firm competitive advantage and firm performance was, however, already highlighted by several early theorists such as Selznick (1957), Andrews (1971), Ansoff (1965) and more explicitly by Penrose (1959), and the growing interest on internal resources was not due to its newness but was motivated, rather, by the search of alternative theories to correct the limitations of the then overwhelming S-C-P paradigm.

The RBV seeks, through an *inside-out* approach, to explain how resources could confer competitive advantage (Hoskisson et al, 1999) and rejects, therefore, the deterministic assumption of the S-C-P model by arguing that firms are not completely constrained in their conduct by their external environment, which they could proactively shape and manage (Powell, 1996; Sudarsanam, 2003). Barney (1991) argues that only valuable, rare, inimitable and nonsubstitutable resources are supposed to generate sustainable competitive advantage. Furthermore, and as discussed in section 2.6, *resources* could constitute, at best, a source of competitive advantage and they could not generate competitive advantage by themselves, unless they are leveraged through firm's *capabilities*.

Beyond the debate on the differences between competences and capabilities, we have retained in section 2.6 that the latter are generally more organizational in nature and tend to encompass, resources, organizational components (cultural and

structural), processes, routines and information flows. Before moving to the discussion of the RBV implications on M&A, it is worth to recall that resources and capabilities are accumulated through firm past decisions and actions (Wernerfelt, 1984, Peteraf, 1993; Teece et al, 1997), which infers evolutionary and path dependence assumptions.

The RBV considers M&A as a vehicle through which firms could exchange firm-specific resources that are subject to severe market failures and are difficult to develop internally in order to rapidly meet new competitive pressures (Nelson and Winter, 1982; Teece, 1987; Mitchell, 1994). Under the RBV perspective, firms engage in acquisitions to enhance value by reconfiguring their resource base through acquiring new resources, redeploying existing resources into new uses, or by combining new resources with existing or underutilized ones (Capron et al, 1998). Other authors consider that M&A are used by firms to reach distant resources and are useful when firms deem to undertake fundamental changes in their businesses through overcoming path dependency constraints imposed by their existing routines (Karim and Mitchell, 2000; Capron and Mitchell, 1998; Capron and Anand, 2007). In addition, Coff (1999) considers M&A as a mean to acquire knowledge, while Harrison et al, (2001) assert that firms engaging in M&A seek to acquire complementary resources rather than the accumulation of similar ones.

Finally, The RBV critics point out the imprecise definitions of its concepts, its tautological statements, its assumption of product market stability, and its lack of being a theory of competitive advantage due to its marked focus on sustainability and not on value creation (Foss et al, 1995; Williamson, 1999; Priem and Butler, 2001). Sirower (1997: 25) considers the RBV concepts as "*mere descriptions of what has occurred in the past*", and which, in his view, "*...give managers little help in formulating expectations about the outcomes of future strategic investments*".

Moreover, *Synergy* has been the main justification to engage in M&A from both the economic and the strategic perspectives. Economies of scale or scope and market power contribute to create synergistic gains (Seth, 1990) through costs reduction or/and revenue enhancement (Gaughan, 2005). In addition, *Relatedness* is

considered as a significant precedent of synergistic gains that may come in the form of *technical, pecuniary and portfolio* economies (Lubatkin, 1983). *Technical* economies refer to scale economies, especially from the production and marketing operations, while *pecuniary* economies refer to firm improved market power and *portfolio* economies are about risk reduction through diversification (Lubatkin, 1983). However, and according to Sirower (1997), "*the concept of synergy remains vague and mysterious, with little financial or strategic meaning*", while Allaire and Firsirotu (2001) described synergy as the "*hocus pocus word of the M&A magic show*".

From an RBV perspective, Barney (2001) argues that if there is no synergistic, private, unique and inimitable cash flows that stem from the bidder and the target combination, then *Relatedness, per se*, could not constitute a sufficient condition to create value for the acquiring firm. However, unique and inimitable *synergistic cash flows* (i.e. NPV of the combined entity is greater than the sum of the individual NPV of the bidder and the target) exist only in imperfectly competitive market for corporate control, in which the other bidders could not duplicate the uniquely synergistic cash flow gained by a particular bidder when combined with a given target, or when the bidder have private information about the existence of a synergistic value between him and the target, or where the other bidders and the target itself are unaware about this potential synergy.

Thus, imperfectly competitive markets could be identified by comparing the value of the bidder and the target relatedness against the value of relatedness with the target for other bidders (Barney, 2001). While these propositions seem logical and conceptually appealing, they remain highly difficult to apply in practice. Bidder's management should, therefore, possess sufficient experience and specific skills that enable them to identify such imperfections in the market of corporate control. The implications and challenges of this particular aspect and its impact on the likely success of a potential acquisition will be discussed in section 3.3.

To summarize, M&A activities are motivated by synergistic gains that come from scale and scope economies, market power, complementary resources and capabilities, resource deployment and transfers, relatedness and unique or difficult to

replicate cash flows that stem from this relatedness. M&A could be also motivated by the will of undertaking path-breaking changes and may take the form of horizontal, vertical, concentric (i.e. related), or conglomerate (i.e. unrelated) mergers. However, empirical evidence report systematic failures of M&A contribution in creating value for the acquirer's shareholders (Gaughan, 2005; Dodd, 1980; Asquith, 1983; Bradley et al, 1983; Jensen and Ruback, 1983; Malatesta, 1983). We will review and discuss the empirical evidence on the nature and the causes of these failures in the next two sections.

3.2 The Puzzle of the Post-merger Performance and the Integration Challenges: Empirical Evidence from Previous Research

Post-acquisition performance, or M&A success and failure, could be assessed in different ways and estimated through different proxies depending on the perspective under which the impact of these operations are investigated. The financial perspective is the most widely used method for measuring post-acquisition performance, while the organizational perspective is generally interested in the integration challenges of post-acquisition processes and their impact on M&A success. From the financial perspective, the objective of M&A decisions is to maximize shareholder value (Jensen and Ruback, 1983; Weston et al, 1998; Gaughan, 2005; Sirower, 1997). However, the evidence on M&A impact on creating value for the acquirer's shareholders remains highly inconclusive (Datta et al, 1992; Sirower, 1997; King et al, 2004; Gaughan, 2005).

Generally, Post-acquisition performance is investigated by integrating both the strategic and the financial perspectives (Sirower, 1997). In a recent meta-analysis of Post-acquisition performance, King et al (2004) pointed out that previous research investigated the effect of four common variables on post-acquisition performance, that is, (1) whether or not the acquisition was made by a conglomerate; (2) whether or not the acquisition was of a related firm, (3) the method of payment used for acquisition, and (4) the acquirer's prior M&A experience. Furthermore, Gaughan (2005) divided previous research on short-term and long-term effect studies, where in the former, researchers focus on a narrow time windows around

the acquisition by using event studies, while in the latter, they track performance of deals over a longer period of time. Empirical evidence on these four variables, as well as, the results reported from the short-term and the long-term post acquisitions performance research streams are reviewed and discussed hereafter.

First, the evidence of the impact of diversification on post-acquisition performance is mixed, and while some authors concluded that conglomerate acquirers tend to realize higher post-acquisition returns than nonconglomerate acquirers (Ravenscraft and Sherer, 1987; Agrawal et al, 1992; Campa and Kedia, 2002), others reported a *diversification discount* in the case of conglomerate acquisitions (Berger and Ofek, 1995; Anand and Singh, 1997), a decreasing effect on value of unrelated diversification (Amihud and Lev, 1981), or an equivalent post-acquisition performance between related and unrelated acquisitions (Lubatkin, 1987; Elgers and Clark, 1980; Healy et al, 1990).

Second, the acquisition relatedness received a large interest from scholars in both the financial and the strategic fields, and numerous studies support the existence of a significant positive effect of relatedness on buyers' returns (Healy et al; 1990; Datta and Puia, 1995; Weech-Maldonado, 2002; Lubatkin and O'Neill, 1987; Flanagan, 1996; Scanlon et al, 1989; Chatterjee and Lubatkin, 1990). This significant effect could be explained by several factors such as the use of the acquiring firm's management knowledge about the company's direct environment and their experience in running similar or highly related activities (Prahalad and Bettis, 1986; Hitt et al, 2001), or their familiarity with the target firm's markets (Roberts and Berry, 1985). However, relatedness may inflate management self confidence and lead to an overestimation of the expected synergistic gains or that of their ability to extract them once the integration processes begin (Allaire and Firsirotu, 1993; 2001; 2004; Sirower, 1997).

Third, the effect of the acquisition's method of payment was widely investigated in the finance literature, and the evidence shows that financing acquisitions with cash signals that the acquiring firm's managers expect high and strong post-acquisition performance (Travlos, 1987). Indeed, the use of stock to

finance an acquisition may signals that the bidder's management believes that their company is overvalued, which may create an unfavourable market reaction (Myers and Majlounf, 1984). Thus, *ceteris paribus*, cash acquisition should outperform acquisitions financed through stocks equity.

Finally, the organizational perspective highlighted the critical importance of previous organizational and managerial experience during the integration phase (Haspeslagh and Jemison, 1991; Hitt et al, 1998). Furthermore, a clear and detailed integration plan showing clearly how the acquiring firm management intend to extract the expected synergies should be elaborated before entering or starting any bidding processes (Sirower, 1997). In the same vein, Hafsi and Toulouse (1994) suggest that, contrary to what was observed in practice, formulation (or content) and implementation (or process) phases of acquisitions should not be separated from one another, and that managers should, at an early stage, assess and perform the necessary and intended changes of the beliefs, values, structures, and competitive strategies of the two combined entities.

Furthermore, Allaire and Firsirotu (2001: p.10) pointed out that *"putting together, meshing, two sizeable organizations brings forth all sorts of clashes-clashes of egos, of power groups, of cultures and values, of operating systems, of ways of doing and behaving"* and that, while any acquisition should deal with these issues, their magnitude and effect on the expected benefits of acquisitions will vary with the size of the acquired firm, the extent and form of the planned integration, and the degree of cultural similarities and differences between the combined entities (Allaire and Firsirotu, 2001). The authors argued that while *"some of the failures have to do with the human frailties of CEO's: hubris, warped motives, poor interpersonal skills and inexperience"* (2001, p.6), the low success rate of acquisitions could be attributed to three main issues: Driving growth through acquisitions; Getting the synergies and dealing with complexity (2001, p.7).

The authors conclude elsewhere that *"acquisitions in the pursuit of growth to placate financial markets have proven extremely costly in terms of shareholder wealth. Poorly planned or badly executed integration or simply delayed integration*

have always played, and continue to play, a significant role in the value destruction of acquisitions by making it impossible to recoup the market premium paid for the acquired company." (Allaire and Firsirotu, 2001: p.13). However, the fundamental challenge, from the perspective of Allaire and Firsirotu (2001), remains in the acquirers' ability to put in place a sound strategic governance system to extract value from the complex structure that results from mergers and acquisitions. For the authors, Strategic governance refers to:

"...the formal and informal processes by which the corporate office, "the centre", orients, prods, monitors, and controls its various businesses...Strategic governance is all about simplifying the leading and the operating of a diverse company. It is about creating an environment in which business leaders feel and act like entrepreneurs and the corporate office shapes their strategic orientations and participates in key decisions...it means re-evaluating and possibly changing the corporate architecture of the company, the decision-making process, the role of strategic planning and budgets, the quality and autonomy of business leaders, the nature of motivation and reward systems." (Allaire and Firsirotu, 2001: p.11-12).

Finally, they contend that even though the high failure of entrepreneurial, innovation and acquisition activities, they remain essential to economic dynamism, and that regardless of:

"...the general dislike of M&A transactions and universal praise of entrepreneurship and innovation in the public at large"... "Should we not consider these three economic activities, entrepreneurship, product innovation and M&A's, as engines of productivity enhancement, of efficient allocation of capital, of adaptation to economic contexts?" (Allaire and Firsirotu, 2001, p. 4).

In an interesting study, Sirower (1997) discussed in length the difficult path in the quest of post-merger synergy and proposed four *sine qua non* (i.e. necessary but not sufficient) conditions for any acquirer willing to increase its chances in achieving post-acquisition synergy: (1) have a clear strategic vision to share among large constituents groups; (2) prepare an operating strategy that clearly identify where, in the firm value chain, the synergy is expected, how to make it work and how competitors will find it difficult to imitate; (3) conceptualize how systems integration will be performed, which refers to the understanding of the target systems and the

degree of integration expected from the merger; and finally (4) have a clear vision on how the post-merger organization with its structure and culture is intended to work and what changes are necessary to make on the compensation systems, the hierarchical positions, and to cultural attributes such as the shared set of norms, values, beliefs and expectations that have to be embodied in the new organization resulting from the acquisition.

All these conditions should be thoughtfully analyzed and carefully determined before entering any bidding process, and most importantly, before offering any price for the prospect. However, managers should not fall in the determinism trap and should be permanently aware of unforeseen changes that could divert their initial acquisition blueprint and be ready to adapt it according to the real issues that may arise during the integration phase (Haspeslagh and Jemison, 1991).

In addition, previous M&A experience may also lead to the development of in-house *acquisition capability*, which lies in the ability to identify and select targets, to negotiate business combinations, to perform post-acquisition integration (Bruton et al, 1994; Haleblian and Finkelstein, 1999; Helfat and Lieberman, 2002), and to correctly comply with the four cornerstones proposed by Sirower (1997). In addition, the RBV perspective considers acquisitions routines as organizational processes that bring new resources to the firm from external sources and portray them therefore as *Dynamic capabilities* (Eisenhardt and Martin; 2000; Capron and Anand, 2007). Acquisition capabilities could also lead to long term competitive advantage by allowing the creation of inimitable and hardly to duplicate resource configurations that stem from the integration of past acquisitions (Eisenhardt and Martin, 2000).

From the financial perspective, the short-term research stream is based on two principal assumptions: (1) the capital markets' efficiency, for which share price, generally, captures all the future benefits and costs of an acquisition around the announcement date (Fama et al, 1969); (2) the abnormal returns around the acquisition date are correlated to long term post-acquisition performance measures, and could, therefore, serve as a good predictor for future M&A success (Healy et al, 1990; Andrade et al, 2001).

Short-event windows are used, therefore, as a methodology to capture the market valuation of an acquisition by assuming that the capital market absorbs quickly all the information and future issues of the announced merger and translates it in the stock price during a short window of time around the acquisition date, and by examining the abnormal returns (i.e. the announcement stock returns) during a period going from, let say, 5 days before the event (i.e. announcement date) to 5 days after, we can assess the impact of the acquisition on the acquirer post merger performance.

U.S studies using the short-term event method reported generally bidders' abnormal returns that ranged from 1% (Magenheim and Mueller, 1988; Jarrel and Poulsen, 1989; Bradley et al, 1988; Loderer and Martin, 1990) to 4% (Jensen and Ruback, 1983) in the case of *tender offers*, and from 0% (Magenheim and Mueller, 1988) to 1% (Jensen and Ruback, 1983; Loderer and Martin, 1990) in the case of *mergers*. However, the same studies cited above, reported targets' abnormal returns ranging from 16 to 29% in the case of *tender offers*, and from 5 to 16% in the case of *mergers*. Thus, it seems that targets' shareholders enjoy huge returns at the expense of the bidders' shareholders. As we will see in the following paragraphs, these unbalanced payoffs, between the target and bidder's shareholders, tend to become worse when assessed from a long term perspective.

The long term performance stream uses the same event methodology but extends the time windows of the analysis, by covering periods that could exceed 60 months after the acquisition event. This perspective rests on the assumption that the stock market is not completely efficient and continues to react after the event as long as new information on the progress of the acquisition and its actual integration is realized. However, the assessment of an acquisition impact, using a long-term window for analysis, may suffer from disturbances created by other separated events, such as the acquirer strategic or operational changes that have nothing to do with the acquisition in question (Sudarsanam, 2003).

U.S studies using the long-term perspective report quite different results than those from the short-term perspective. Bidders' post merger abnormal returns are

found to be negative and ranged from -4% (Franks et al, 1988) to 43% (Loughran and Vijh, 1997) in the case of *tender offers*, and from -28%, -18% and -16% (reported, respectively by Magenheimer and Mueller, 1988; Franks et al, 1988 Loughran and Vijh, 1997) to -1% (Loderer and Martin, 1992) in the case of *mergers*. Targets' positive abnormal returns in the long term (from 24% to 60%) were higher than those reported by short-term analysis (16% to 32%) no matter if the acquisition was a *merger* or a *tender offer*.

All in all, empirical evidence from the U.S is mixed and shows no persistent pattern on the positive impact of M&A on the bidders' performance, while in the case of the targets, their shareholders appear to constantly experience positive returns, regardless of the time window used, or the type of M&A employed.

Since the present thesis is interested in studying the role and impact of Canadian board of directors' governance capabilities on firm performance in the context of M&A, a review of Canadian studies becomes necessary to highlight the particularities, if there is any, of Canadian M&A activities in comparison to their American counterparts.

Although limited in their number, empirical evidence from Canadian studies seems to report different conclusions from those provided by the U.S based research. Indeed, the first large study of the impact of M&A on Canadian firms was published in 1986 and covered 1,930 acquisitions performed between 1964 and 1983. This study reported that in approximately 50% of the cases, bidders' shareholders gained a slight 1,17% significant abnormal returns around the announcement date, while the targets' shareholders gained around 3,58% during the same period (Eckbo, 1986).

Another recent study by Eckbo and Thurnburn (2000), despite the use of the same sample as in Eckbo (1986), reported that approximately 50% of the Canadian acquirers' shareholders averaged 1,27 % in abnormal return around the announcement date, while in the same sample, U.S acquirers' of Canadian companies experienced no significant abnormal returns during the same period.

These researchers found that these results, not only hold for the long term performance (measured by the earnings changes over 3 years after the announcement date), but tend to become more contrasted with significant positive changes in Canadian bidders' EBIT of about 6,5% during the first two years after the acquisition, in comparison to a -25% change for American bidders during the same period.

In a more recent article, Ben Amar and André (2006) analyzed 327 acquisitions over the period 1998-2002 and reported that bidders' shareholders received significant average abnormal returns of 1,06% around the acquisition date. However, they noticed that family firms generated a greater abnormal return of about 2% more than those experienced by non family firms in their sample. Similarly, Yuce and Ng (2005), using a sample of 1361 Canadian acquirers and covering transactions for the time period 1994-2000, concluded that acquirers' shareholders gained in average 2% cumulative abnormal returns around the event period (-2,+2).

Thus, the evidence from Canadian studies seems to systematically report, slight, but positive and significant abnormal returns for acquirers, which is not the case for the American studies. These differences between Canadian and US evidence could be explained by the smaller size of Canadian capital market, industries and companies in comparison to their American counterparts, as well as, the level of industry and output concentration in Canada (Eckbo, 1992). In addition, differences in M&A regulations and anti-trust laws could also explain these differences since regulations are found to be correlated with acquirer performance (Yuce and Ng, 2005).

In summary, acquirers post merger performance seems to be problematic and the empirical evidence supports the fact that M&A are, by far, more beneficial to targets than to the acquirers' shareholders. M&A failure in creating value for the acquirer was largely explained by the existence of corporate governance problems, such as managers going unchecked by their boards and seeking to obtain, through M&A, private gains, higher compensation, prestige, job security and human capital risk reduction (Jensen and Ruback, 1983; Jensen, 1986; Firth, 1991; Avery et al,

1998; Amihud and Lev, 1981; Hubbard and Palia, 1995; Wright et al, 2002). However, and as discussed through this section, M&A failures could be also explained by strategic and organizational weaknesses, such as the lack of a clear strategic vision, management overconfidence and/or inexperience in evaluating potential synergies, in negotiating and/or integrating efficiently the acquired entities, which may, even in the absence of opportunistic behaviours, impede value creating for shareholders.

Traditional corporate governance, particularly in the finance field, overestimated the role of opportunistic behaviour as the only explanation of M&A failures, and underestimated the strategic and organizational complexity behind these operations. Being certainly an important part of the problem, corporate governance should, however, not only consider disciplining actions as possible solutions to impede M&A failures, but should also consider the critical strategic role of those who approve these decisions, that of the board of directors. Indeed, boards should not only deploy their monitoring ability to oversee management along the M&A process, but should, in addition, contribute actively in these processes by leveraging their strategic capabilities in order to support, complement and guide managers' efforts to set strategic vision, operating strategy and to identify, select, evaluate, negotiate and integrate M&A in order to extract all the possible value from these operations and, above all, avoid to engage the firm in winners' curse bidding when speculative actions drive prices to levels that render any value creation or synergistic gains impossible to achieve.

Hence, legitimate and credible directors acting in boards possessing strategic and monitoring capabilities may better influence management in order to state a clear boundary beyond which the firm should give up and withdraw its offer if the bidding price reaches a level with which no value creation could be reasonably achieved.

Consequently, and as a central issue in the present thesis, we hope bring evidence that will support the view that corporate governance should depart from the traditional orthodoxy that considers agency costs reduction as its main concern, by

adopting a more active and dynamic role in order to become also a source of firm competitive advantage and contribute, therefore, to the improvement of firm's rent generating potential.

In the next section we will discuss the ins and outs of M&A from the traditional corporate governance perspective, and how it should be extended to involve a more dynamic and strategy oriented role through the board of directors' resource and capabilities in order to become a source of competitive advantage, rather than a mere set of disciplining mechanisms aiming to passively achieve some formal, fiduciary and monitoring functions.

3.3 Corporate governance and the Board of directors' role in M&A decisions: Theoretical integration, hypotheses and thesis conceptual model

As discussed in Chapter 2, corporate governance discourse was largely dominated by the agency theory, which is itself a branch of corporate finance microeconomics (Tirole, 2006; Baskin et al, 1997). Hence, when corporate governance is considered from the agency perspective, its primary general concerns are about information asymmetry and moral hazard and their impact on goal conflict and congruence between principals and agents and how the formers should ensure, through internal and external governance mechanisms, that their interests are maximized or, at least, protected.

From the target perspective, corporate governance is interested in M&A as an external disciplining mechanism where hostile takeovers serve as a deterrent tool that impede managers from undertaking suboptimal decisions driven by selfish behaviour, or as a mechanism of last resort, activated when internal governance fails to prevent and correct management deviations (Fama and Jensen, 1983; Martin and McConnell, 1991; Mitchell and Lehn, 1990; Comment and Jarrell, 1995; Berger and Ofek, 1996).

As for the acquirer, corporate governance is interested on the management motives behind M&A decisions in contexts where the separation of ownership and control have created information asymmetry, diverging interests and opportunistic

behaviour, and where managers are considered as maximizing agents pursuing their own benefits at the expense of firm shareholders who should, in turn, set internal governance mechanisms to mitigate the agency costs stemming from this conflicting relationship (Jensen and Meckling, 1976; Morck, Shleifer and Vishny, 1990; Amihud and Lev, 1981).

Since the present study is concerned about acquirers' post-acquisition performance, we will address only the issues that arise in the case of the bidders and not necessarily those that arise from the point of view of the targets. Thus, we will first present what the previous literature has to tell us about corporate governance implications for M&A, and follow with the development of the hypotheses to be tested as part of the present thesis.

From the agency perspective, Jensen (1986) argued that excessive free cash flows may be used by managers to make non value increasing acquisitions, while others noted that managers will engage in unrelated conglomerate acquisitions to diversify their own risk due to the fact that managers' undiversified risk could become severe when equity based compensation is substantial (Lewellen, 1971; May, 1995). Furthermore, empirical evidence reports a significant positive relationship between CEO compensation and firm size (Baker et al, 1988; Tosi et al, 1989; 2000), which could push management to pursue growth strategies through mergers and acquisitions to enjoy higher salary, perquisites and pay stability (Mueller, 1969; Gomez-Mejia et al, 1987; Kroll et al, 1993; Combs and Skill, 2003; Gaughan, 2005). However, other researchers found that managerial ownership was positively associated with the interests of shareholders in general, and that managers with higher ownership participation undertake more successful mergers (Lewellen et al, 1985; Khorana and Zenner, 1998; Tehranian et al, 1987), receive positive stock-market responses for their acquisitions, pay lower acquisition premiums and acquire targets with higher growth opportunities (Dutta et al, 2001).

Firm ownership structure could play an important role in M&A. Indeed, Kroll et al, (1997) found that owner controlled firms (i.e. with an external shareholder possessing more than 5% of its stock) engaged in acquisitions that were generally in

the interests of shareholders, while acquisitions performed by management controlled firm (i.e. diffuse shareholding) were primarily driven by managers' interests. Conversely, Avery et al (1998) found that CEOs engage in M&A to enhance their prestige and reputation, given that those who completed successfully several M&A deals were more likely to earn directorship in other companies than those who did not undertake such operations.

As an alternative to the agency motives, *hubris* or managers overevaluation of their ability to manage new businesses, was largely considered as a motive for undertaking M&A, particularly when management seek diversification through acquisitions (Roll, 1986). Some authors found that *hubris* was one of the important motives of M&A along with synergy and agency problems (Berkovitch and Naranayan, 1993), while others found that hubris was significantly related to high premiums, which generally lead to acquisitions' failure (Hayward and Hambrick, 1997). However, Morck et al (1990) argued that hubris infects successful managers more than the unsuccessful ones, while their results show that bad acquisitions were made by bad managers rather than by the successful ones. Furthermore, when accompanied with inaccurate valuation processes of targets, hubris will push managers to enter winner's curse biddings and end with overpayment and higher premiums (Giliberto and Varayia, 1989; Sirower, 1997; Guaghan, 2005).

Few studies have considered Board role in M&A (Byrd and Hickman, 1992; Haunschild, 1993; Beckman and Haunschild, 2002; Wright et al, 2002; Hayward and Hambrick, 1997). Empirical evidence from these studies showed that (1) Boards dominated by outsiders generated higher announcement date abnormal returns than other bidders (Byrd and Hickman, 1992) and moderated the effect of Hubris on paying higher premiums (Hayward and Hambrick, 1997), and that (2) independent boards were associated with less acquisitions motivated by management self serving behaviour (Wright et al, 2002). However, other studies reported a non significant or a negative effect of board composition on firm post-acquisition performance (Subrahmanyam et al, 1997; André et al, 2006).

In addition, Beckman and Haunschild, (2002), using a sociocognitive perspective, found that firms having interlocks with other similar companies, through their directors, paid lower premiums for their acquisitions, while Haunschild, (1993) and Westphal et al, (2001) found that interlocking directorate have an impact on the type of acquisitions made by the focal firm who tends to replicate the type of acquisitions made by its tied-to firms.

As in the case of the relationship between board of directors and firm general performance, previous literature provides little and, at best, mixed evidence on the impact of board of directors on post-merger performance. These mixed results could be explained by the adoption of single and aggregate measures of board independence, such as the proportion of outsiders/insiders as a proxy, or the consideration of only the monitoring function of boards without considering their strategy role and the implications of other board resources on firm performance. Another limitation of the previous studies consists in linking board composition directly to post-acquisition performance, without considering intermediate effects of firm decision making processes on the acquisition success.

Furthermore, and as highlighted by the literature reviewed in the present chapter, the firm ability to select potentially successful acquisitions is a highly valuable capability, where corporate governance, especially the board of directors, is called to play an important role. Thus, and according to previous research, potentially successful acquisitions could be considered as those: (1) based on solid strategic rationale (Anslinger and Copeland, 1996; Sirower, 1997; Sudarsanam, 2000); (2) incurring lower premiums (Sirower, 1997; Hayward and Hambrick, 1997) and avoiding multiple bids (Weston et al, 1998); (3) involving related businesses (Healy et al; 1992; Datta and Puia, 1995; Weech-Maldonado, 2002; Lubatkin and O'Neill, 1987; Loree et al, 2000; Flanagan, 1996; Scanlon et al, 1989; Chatterjee and Lubatkin, 1990); (4) providing strategic fit between the acquirer and target or having similar strategic characteristics (Hopkins, 1987; Singh and Montgomery, 1987); (5) providing the acquirer with complementary resources (Harrison et al, 1991; Hitt et al, 1998); (6) paid in cash rather than security (Travlos, 1987; Loughan and Vijn, 1997) (7) having similarity with previous acquisitions made by the acquirer, and implying a

learning effect (Haspeslagh and Jemison, 1991; Allaire and Firsirotu, 2001); (8) where the target Tobin's q is lower than the acquirer's (Lang et al, 1989; Servaes, 1991).

However, previous studies that attempted to assess board effect on firm performance used a direct correspondence between board attributes and post-acquisition performance, without considering the effect of pre-acquisition processes, particularly deal selection and completion. Indeed, the ability to select and complete a potentially successful acquisition plays the most determinant role in post acquisition success (Sirower, 1997), and its determinants should be investigated in order to detect which corporate governance attributes affect these decisions and constitute, therefore, a source of the competitive advantage residing in the firm ability to systematically select profitable acquisitions.

Accordingly, we consider in the present thesis that corporate governance and board of directors may exert a significant impact on firm performance, through the board ability to shape distinctive board capabilities and its capacity to deploy them through its influence on the firm resource allocation decisions (Bouzinab, 2005), such as in the case of M&A operations. The Governance value creating perspective (Allaire and Firsirotu, 1993; 2003; 2005, 2008, 2009) provides an interesting general framework that integrate several concepts that stem from the various theories reviewed in Chapter 2, and constitutes therefore the main ground for the theoretical development and the hypotheses to be proposed in the remaining part of this section in order to answer our research questions presented in Chapter 1, and to serve as a theoretical background for the empirical model proposed in the next chapter. In order to link the Value Creating Governance four pillars with Governance resources and Board monitoring and strategic capabilities, we consider that the strategy process pillar could be enhanced when firms possess relevant governance resources and Board strategic capabilities, while the efficient use of financial and strategic information and the setting of a calibrated compensation system could be enhanced through the existence of relevant governance resources and Board monitoring capabilities (Figure 3.1).

As discussed and proposed in section 2.6 of the present thesis, Governance resources could be tangible or intangible. *Governance tangible resources* are those that are explicit, such as formal governance structures, board committees, board structural and formal attributes such as board remuneration and financial participation or directors' linkages and interlocks with other firms (Horner, 2006; Bouzinab, 2005; 2006). *Intangible Governance resources* are tacit and could not be easily identified, but may be inferred through qualitative analysis, such as human capital, relevant experience, knowledge and expertise, reputation and valuable information embedded in the resources provided by board members (Horner, 2006; Bouzinab, 2005; 2006).

In addition, *Governance capabilities* were defined as the firm specific and difficult to imitate, corporate governance processes and board capacity to use the governance resources and competences available to the firm in order to achieve a competitive advantage by lowering effectively the agency costs, and ideally, by contributing to the generation of superior economic rents through directors' active involvement in firm strategic decision making processes. Thus, *Governance capabilities* could be divided into two parts: *Board control capability* and *Board strategy making capability*.

Governance Value Creating Perspective (Allaire and Firsirotu 2003; 2004; 2009) provides an interesting classification of what was defined as governance resources and capabilities, by identifying those contributing to Board *legitimacy* and those that enhance Board *credibility*, *Strategy process*, *accurate use of financial and strategic information*, and *efficient setting of a calibrated compensation system*.

The *Legitimacy* dimension of pillar I is considered as a multidimensional construct that involves governance issues such as the quality of the selection processes and the resources available to the selection committee, board members' financial implications and the nature of the stakeholders and shareholders they represent, constituting therefore, the reflection of firm ownership structure. Based on a solid theoretical ground, the *legitimacy* dimension, integrates corporate governance aspects that stem from agency, resource dependence and institutional

theories. *Legitimacy* should be considered, however, as a *sine qua non* condition for corporate governance effectiveness and its effect on firm performance (Allaire and Firsirotu, 2003; 2008).

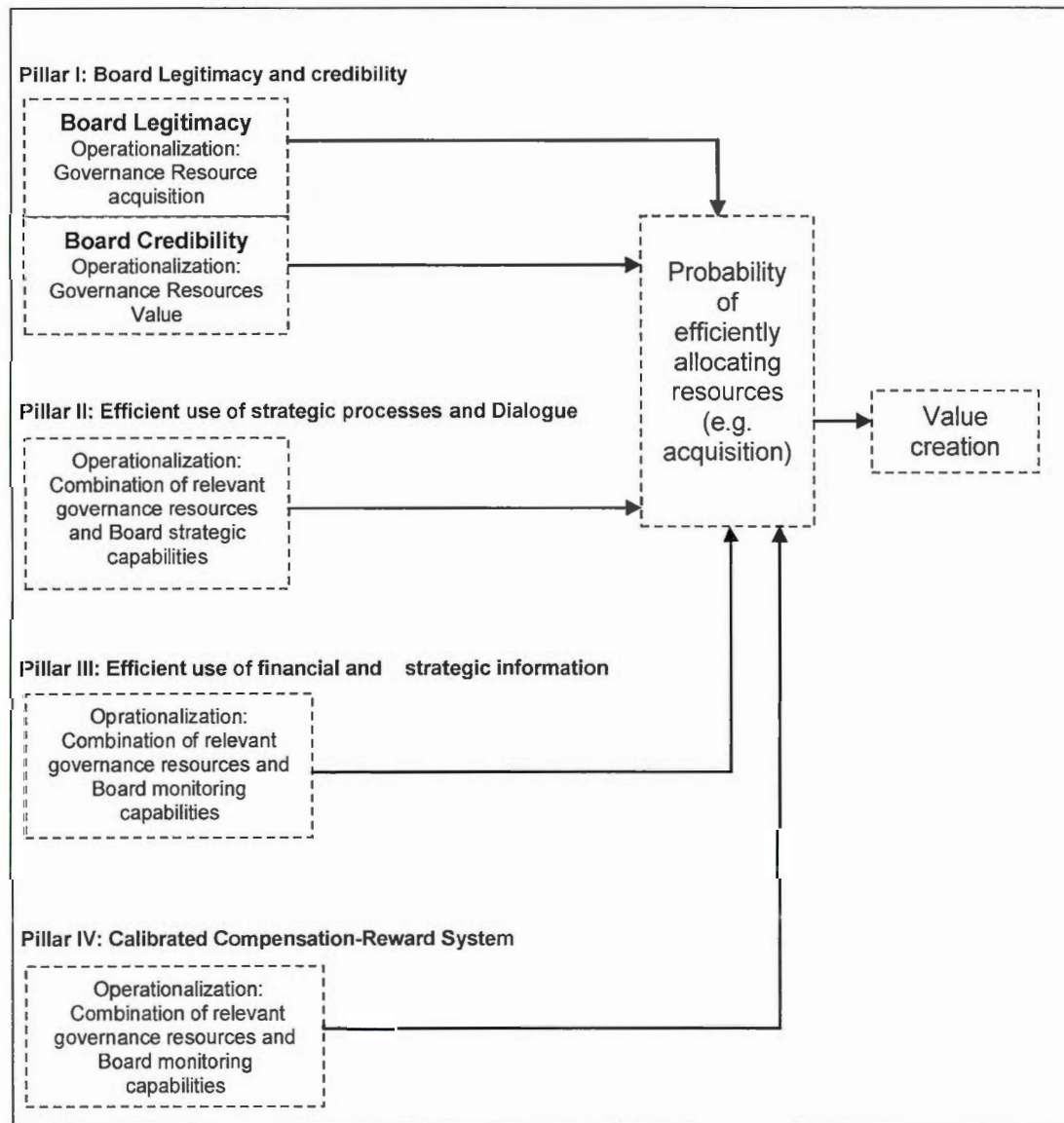


Figure 3.1: Corporate Governance and Board effect on selecting successful acquisitions: The link Between the Value Creating Governance perspective Four Pillars (Allaire and Firsirotu, 2003; 2004; 2009)

However, it may not be concluded that the board has legitimacy because the majority of its members are independent directors. As discussed in chapter 2, empirical evidence on the impact of board composition on governance effectiveness or firm performance is mixed (Daily, 1995; Johnson et al, 1996; Dalton et al, 1998). Thus, Daily (1995) concluded that there is no systematic relationship between board composition and its service at discharging its control functions. The independence concept, based solely on the existence of a majority of outside directors is not, by itself, a sufficient condition for board effectiveness. Furthermore, Beatty and Zajac (1994) found a negative association between the proportion of outside directors and firm performance, while Bhagat and Black (1997) found no significant evidence on the effect of the proportion of outside directors on firm performance. The positive effect expected from the presence on the board of a large majority constituted by *outside* members, is therefore likely to be reversed by an exacerbated information asymmetry when these directors are lacking specific information, expertise and knowledge about the company and its businesses (Walsh and Seward, 1990; Allaire and Firsirotu, 2003). Severe information asymmetries suffered by the so called *independent* directors will imply a passive implication of the board in the firm decision making processes, in addition to an awkward accomplishment of its decision control role, as prescribed and expected by agency theory. Consequently, the concept of independence, when defined in terms of board composition based on the existence of an outside directors' majority will not contribute to make accurate decisions and thus, contribute to select successful acquisition. On the light of the previous discussion, we formally state that:

Hypothesis 1 (H1): Legitimacy based on the independence of board members is negatively related to success of acquisitions.

Evidence from previous research has reported that board shares' ownership could have a significant positive impact on board independence and firm performance (Bothwell, 1981; Kesner, 1987; Kren and Kerr, 1997; Bhagat et al, 1999; Zajac and Westphal, 1995; Morck et al, 1988). Hence, and according to

agency theory, board legitimacy will increase when directors have higher interests invested in the firm. However, other authors argued that director pay is generally influenced by the CEO, which may reduce board independence (Kosnik, 1990; Bebchuck and Fried, 2004), while others reported a negative (although no significant) relationship between outside directors' ownership and Board independence degree, measured by the fraction of independent directors minus the fraction of insider directors (Bhagat and Black, 2002). Finally, others have found a negative relationship between the percentage shares held by outside directors on the acquisition committee and board performance measured as Market to book ratio (Hayes et al, 2004). Given these mixed results, we suppose that:

Hypothesis 2 (H₂): Legitimacy based on shares owned by outsider Board members is not necessarily related to success of acquisition.

While Board composition and ownership effect on firm performance were largely investigated under the agency theory research stream, the quality of board selection and nomination processes were not really considered in empirical studies. Furthermore, normative statements issued from the managerial hegemony theorists argue that directors' selection and nomination are largely influenced by managers (Mace, 1971; Pfeffer, 1972), while others showed some empirical evidence that supports this view (Shivdasani and Yermack, 1999). We argue that nomination committees with established working procedures and relevant resources will constitute an important institutional mechanism that improve directors' selection and independence (Ruigrok et al, 2006) and will positively contribute to firm performance. In formal words:

Hypothesis 3 (H₃): Legitimacy that stems from effective board selection processes will enhance the probability of making successful acquisitions.

Hypothesis 4 (H4): In the case of successful acquisition, Legitimate Boards with effective board selection processes will positively and significantly impact post-acquisition economic performance.

As discussed in chapter 2, Allaire (2008) argue that for an exchange-listed company (which is the case for our sample acquirers), significant shareholders playing an active role in management and governance of the firm, should be considered as legitimate board members, and their direct participation in the board or its committees should be proportional to the percentage of their equity participation. Thus, and according to Allaire (2008), in the case of the presence of significant shareholders or their representative in the board of directors or in one of its committees, more than the third of directors should be independent from both management and these significant shareholders. Formally, we then consider that:

Hypothesis 5 (H5): Legitimacy that stems from Boards with financially committed shareholder representation will significantly discriminate between successful and unsuccessful acquirers.

Hypothesis 6 (H6): In the case of successful acquisition, Legitimate Boards with financially committed shareholder representation will positively and significantly impact post-acquisition economic performance.

Credibility, as a multidimensional construct, involves governance resources that directors bring to the firm, such as their generic and specific knowledge, experience, organizational and strategic expertise, information and relational capital. Thus, the *Credibility* construct integrates concepts that are in line with the RBV, the resource dependence theory and the socio-cognitive branch of the institutional theory discussed in chapter 2, and as in the case of *Legitimacy*, the *Credibility* construct is also a *sine qua non* condition to effective corporate governance and without adequate strategic processes and dialogue, the availability for directors of timely and accurate financial and strategic information, and balanced incentives for managers, even *legitimate* and *credible* boards will exert no significant effect on firm

performance (Allaire and Firsirotu, 2003). However, and according to Allaire and Firsirotu, (2009): *"while it is legitimacy that gives a board the right and the authority to impose its will on management, it is credibility that makes a board effective and value-creating (2009, p. 254).*

Functional backgrounds diversity variables possess the advantage of capturing conjointly experience, information, and perspectives relevant to cognitive tasks performed by the team members (Simons et al, 1999 p. 663). Directors with different backgrounds bring different perspectives and opinions, complementary skills and knowledge (Forbes and Milliken, 1999), which facilitates advice and counsel (Baysinger and Butler, 1985; Hillman and Dalziel, 2003). Yet, some researchers argue that diversity could constitute a double-edged sword (Milliken and Martins, 1996) and while it provides boards with valuable resources it could induce "higher levels of conflicts, interaction difficulties and lower levels of integration" (Hillman and Dalziel, 2003, p.497-498).

Nevertheless, Murphy and McIntyre (2007) noted that contexts are important for valuing the positive effect of diversity:

"Clearly, when discussing diversity, the context is the central question, and with highly unstructured, complex issues to tackle, BOD may benefit from being comprised of demographically and skill diverse individuals representing various value positions and sources of expertise" (2007, p.215).

Accordingly, we could argue that in the context of M&A, Board of directors with diversified occupational backgrounds will contribute better in choosing successful acquisitions than those composed by directors having similar profiles:

Hypothesis 7 (H₇): Board credibility based on directors' background diversity will positively and significantly enhance the probability of selecting a successful acquisition.

Hypothesis 8 (H₈): In the case of successful acquisitions, Board credibility based on directors' background diversity will positively and significantly impact post-acquisition economic performance.

Industry context and specific strategic decisions in which directors were involved in the past contribute in shaping their experience and skills (Bluedorn et al, 1994). Common and similar or highly related industry experience may, therefore, provide directors with accurate and shared cognitive assumptions about the future tendencies in the industry and the course of action and alternatives needed to be taken (Hambrick and Mason, 1984), including the nature of acquisitions the firm should engage in (Hitt and Tyler, 1991).

The nature and the level of human capital- defined as a set of abilities, expertise and knowledge acquired by an individual from previous work experience (Bailey and Helfat, 2003)- that directors bring to the board will largely affect the board credibility, especially if directors' previous experiences are industry-specific. These Industry specific experiences refer to an individual director's knowledge about an industry specific competitive conditions, consumer needs, technology and investment requirements, regulations, suppliers and other external stakeholders (Bailey and Helfat, 2003; Kor and MisanGyi, 2008). In a recent empirical study, Kor and Sundaramurthy (2008) concluded that:

"Prior experiential knowledge of the industry helps outside directors to develop a sophisticated and tacit understanding of the current and future industry dynamics, which in turn enables them to better evaluate manager's strategic proposals." (2008: p.17-18).

Furthermore, outside directors with relevant experiences are, not only, more likely to give better advice to managers, but are also more able to contest objectively management proposals (Carter and Lorsh, 2004) and contribute to reduce their information asymmetry disadvantage when their collective average industry specific experience is higher than the average experience of the firm's top management. Another study by Kroll et al (2007) reported that advice and counsel of outside directors with industry experience affect positively firm performance.

However, and as noted by McDonald et al (2008), extant literature *"has given little consideration of the performance implications of directors' experience"*,

moreover, they argue that “...there have been few, if any, systematic efforts to conceptually elaborate this basic notion by delineating the nature and sources of directors’ expertise, and by describing how that expertise might be linked to the relative success of specific firm strategic actions.” (2008: p.1156).

We hope that the present thesis will add some additional insights on this important issue of outside directors’ previous experience and how it will enhance board credibility as defined by Allaire (2008) and Allaire and Firsirotu (2009), and how it would, in turn, contribute to the success of acquisition operations, which lead us to the following propositions:

Hypothesis 9 (H₉): Board credibility based on collective board members industry specific experience and knowledge will positively and significantly enhance the probability of selecting a successful acquisition.

Hypothesis 10 (H₁₀): In the case of successful acquisitions, Board credibility based on collective board members industry specific experience and knowledge will positively and significantly impact post-acquisition economic performance.

Moreover, collective experience could imply that in some cases directors may hold multiple directorships and could negatively affect Board credibility. However, Ferris et al (2003) examined the effect of busy directors on firm performance and not only they found that there is no evidence of a negative impact of directors with multiple board appointments on firm performance or on the likelihood of securities fraud litigation against firms having busy directors, they went even further by concluding that:

“...Firms rely heavily on multiple directors to provide managerial oversight and monitoring through participation on corporate governance committees” (p.1105).

As for Perry and Peyer (2005), their results were consistent with those of Ferris et al (2003), recognizing that:

"...Our findings cast further doubt on the value of limitations on the number of directorships that an individual can hold" (p. 2087).

Recently, DiPietra et al (2008) in analysing the relationships between directors' busyness and firm performance in Italy concluded that:

"the level of Busyness of corporate directors as a measure of board effectiveness in general has a statistically significant and positive influence on firm's market performance" (p. 87).

In an interesting study by Harris and Shimizu (2004), in which they have investigated the impact of busy Boards upon acquisition decisions, it seems that there is evidence of a positive association between busy directors and abnormal returns related to acquisitions, which led the authors to state that:

"busy directors complement inside directors-and no doubt, other outside directors as well- with knowledge on issues such as key M&A obstacles, typical decision biases and leads on advisors that can help guide management through the deal" (2004: p.792) and to argue that "Companies may pursue active directors because they are, in fact, the candidates best equipped to add value...busy directors are busy for good reason- they are good contributors." (p. 793).

On the other hand, Fich and Shivdasani (2006) found that firm performance was negatively affected when boards are composed by a majority of busy directors and that these firms tend to display lower market-to-book ratios, lower ROA, lower assets turnover and lower operating return on sales and concluded that:

"Collectively, our results suggest that boards relying heavily on outside directors that serve on several boards are likely to experience a decline in their quality of corporate governance" (p.721).

As for Core et al (1999), they reported that directors serving on three or more other boards are associated with excessive CEO compensation which may subsequently affect firm performance, while Jiraporn et al (2009) found that board

members with multiple directorships tend to exhibit a higher rate of absenteeism from board meetings.

All in all, it seems from extant research that there is mixed evidence on the positive effect of busy directors' impact on firm performance, which lead us to the following formal proposition:

Hypothesis 11 (H₁₁): Boards with a majority of members holding multiple directorships are negatively related to the probability of selecting a successful acquisition.

Board of directors' literature suggests that monitoring and strategy or service roles are the most important activities to be performed by corporate directors (Johnson et al, 1996; Finckelstein and Hambrick, 1996; Zahra and Pearce, 1989). The agency prescriptions, grounded in the fiduciary perspective, consider the monitoring of management as the main function of the board and that directors will use their authority in determining the CEO and top management pay, along with their ability to hiring and firing them, in order to ensure that organizational assets are used in appropriate ways (Monks and Minow, 2001). However, and while agency theorists recognize the strategy role of the board, they settle for a passive role by considering strategic control (i.e. strategy ratification) as the main responsibility of the board in respect to firm strategy (Fama and Jensen, 1983).

Based on this fiduciary conception, Directors' monitoring role consists in the preservation of the shareholders and other stakeholders' interests by shaping proper control mechanisms such as appropriate incentives for management, information mechanisms through auditing and reporting activities, succession planning and other fiduciary concerns.

Furthermore, resource allocation decisions such as acquisitions involve active board monitoring that contribute to circumvent the CEO discretionary power and to temper his tendency to make hubris based decisions, which could prevent acquisition overpayment and ensures that firm capital investments are in line with the

shareholders interests (Hayward and Hambrick, 1997; Gaughan, 2005). Thus to ensure efficient allocation decisions, the board of directors should shape *monitoring capabilities* that actively involve board auditing and compensation or other relevant committees formed by qualified non executive directors capable to deploy governance resources, such as financial and accounting expertise, experience in setting CEO compensation, and previous experience in selecting and evaluating deals in order to control management behaviour during the pre-acquisition phase, which lead us to the following propositions:

Hypothesis 12 (H12): Board of directors monitoring capabilities involving efficient audit and compensation committees, the availability of financial and accounting expertise, and solid previous experience in resource allocation decisions through board members will significantly enhance the probability of selecting a successful acquisition.

Hypothesis 13 (H13): In the case of successful acquisitions, boards having audit committees with higher proportion of directors possessing financial and accounting skills will positively affect firm financial and operating post-acquisition performance.

Canadian firms exhibit a higher degree of family control and tend to use dual share mechanism to control firm decisions. As discussed in section 2.1.2.3 of the present thesis, family controlled firms and firm having family members on their board of directors may affect their monitoring capabilities. For agency theory, Family controlled firms are viewed as inefficient and backdated structures that may hinder the efficiency of the takeover mechanism. In addition, Public-traded family firms incur, according to agency theorists, higher cost of capital due to the premium paid to minority shareholders in order to compensate them for the expropriated private benefits that the controlling owners will, potentially, enjoy through their control rights (Shleifer and Vishny, 1997; La Porta et al, 1999).

On the other hand, proponents of family held firms put forward that these structures tend to exhibit, under some particular circumstances (i.e. firms with

founder serving as the CEO, with founder as chairman with a non-family CEO or family firms with higher board independence), higher performance than other forms of ownership (Anderson and Reeb, 2003; 2004; Durand and Vargas, 2003; Miller et al, 2005, Villalonga and Amit, 2006). Similar findings were also reported in studies from Western Europe (Maury, 2006; Barontini and Caprio, 2006). However, Miller et al, (2007), conclude that only family firms with lone founders as CEO (i.e firms in which no relatives of the founder are involved) outperform the other forms of corporations. Furthermore, King and Santor (2008) found that Canadian family firms are more profitable than the widely held ones, exhibiting a higher ROA than the average in their sample.

Individual or family control is generally achieved by separating ownership and control rights through pyramidal and cross holdings schemes or through the use of dual-class shares (La Porta et al, 1999). The use of dual class shares by family controlled firm is common and the CEO in the majority of these firms is the controlling shareholder (Gadhoum, 2006). While some studies found that firms using dual class shares, cross shareholding or pyramidal structures tend to perform more than the widely held firms, we may expect that the use of dual class share will contribute to enhance the board monitoring capability (Ben Amar and André, 2006) if the controlling shareholder is also a member of the Board. Thus, family firms with concentrated ownership, using dual class shares and having a controlling shareholder or his relatives on the board will create a monitoring propensity with regard to how management chose and evaluate firm acquisitions deals (Carney, 2005).

In their analysis of family controlled firms, Allaire (2006) and Allaire and Firsirotu (2009: p.236-237) proposed an interesting framework to extract the benefits associated with family-controlled firms using dual class shares while ensuring the protection of minority shareholders and note that: *"An appropriate framework should contain some of the following prescriptions:*

- *All classes of shares should be entitled to receive the same terms and conditions in the event of a proposed takeover of the company. This*

stipulation is called a "coattail" provision in Canada and has been enforced by the Toronto Stock Exchange since 1987;

- *The class of multiple-vote shares should be capped at 4:1, that is four votes as compared with one vote for the other class of shares (compared to the typical 10:1 observed now); this maximum ratio means that the controlling shareholder must own at least 20% of the equity to maintain an absolute control over the votes (i.e. 50% or more). Studies show that too large discrepancy between share of votes and share of equity rapidly reduces the benefits of control (Gompers, Ishii, and Metrick, 2006). Class of shares without any voting right should be banned;*
- *The class of shares with inferior voting rights should elect one third of board members;*
- *Whenever a kin or descendant of the controlling shareholder is a candidate for the CEO position, independent members of the board must discuss the merits of various candidates with the controlling shareholder and report fully at the next annual meeting of shareholders on the process by which the board arrived at a decision;*
- *A special committee of the board, made up of members independent from the controlling shareholder, should review and report on all transactions between the company and related parties;*
- *When non family member of the controlling shareholder is likely to play in the future a significant role in the management or the governance of the company, the board and the controlling shareholder should discuss what ownership structure would be best to ensure the firm's success in the future and protect its founder's legacy."*

Following this discussion on the impact of family firms, we could note that there are opposite views and mixed evidence on the impact of family control on board monitoring capabilities. Furthermore, we could expect that family controlled firms that do not follow the prescriptions above (Allaire, 2006), which is generally the case, may not benefit from their status and contribute to the effectiveness of board monitoring capabilities. Thus we could expect for the acquirers in our sample that:

Hypothesis 14 (H14): Family controlled firms with board members appointed on the board and those using dual class shares will not significantly impact the probability of making successful acquisitions.

In reviewing the literature on board role in strategy making, Hendry and Kiel (2004) identified two schools of thought that emerged from the evolution of the governance field and from the debate on board role in strategy in both the normative and positive streams, that is, *the passive* and *the active* schools. *The passive school* is, on one hand, supported by the managerial hegemony and agency theories (Berle and Means, 1932; Mace, 1971; Vance, 1983; Lorsch and MacIver, 1989; Eisenhardt, 1989) which consider boards as instruments of control, having as the principal duty to monitor and evaluate strategic options generated by management, generally in a post-implementation context. On the other hand, the *Active school* is supported by the Value-creating governance perspective (Allaire and Firsirotu, 2003, 2004, 2009), the stewardship theory (Donaldson, 1990; Davis et al, 1997), the resource dependence theory (Pfeffer and Salancik, 1978; Pearce and Zahra, 1992, Goodstein et al, 1994) and other multi theoretical perspectives (Zahra and Pearce, 1989, Johnson et al, 1993; Stiles and Taylor, 2001), and considers that boards should, in addition to monitoring and evaluating the firm strategies, participate in the formulation phase (as suggested by some agency theorists), and be actively involved in the implementation process (as advocated by the stewardship, resource dependence, stakeholders and institutional theories).

Furthermore, Forbes and Milliken (1999) argued that the Board service task refers to its potential to provide advice and counsel to the CEO and other top managers and to participate actively in the formulation of strategy. According to the resource dependence theory, and as already discussed in Chapter 2, directors provide the organization with valuable resources such as, skills, specialized and general expertise, strategic and functional advice, working knowledge and alternative points of view (Pfeffer and Slancik, 1978; Mizruchi, 1983; Hillman et al, 2000; Baysinger and Zardkoohi, 1986; Johnson et al, 1996).

From the resource based view, directors are associated with the development of critical firm capabilities through their resource and service roles in setting strategic directions, bringing together internal and external resources and by having a say in the resource allocation process for strategic investments (Krug and Aguilera, 2005).

Thus, directors are involved in the capability building functions and constitute firm-specific and costly to-imitate resources that ensure competitive advantage and value creation (Barney, 1991; Mahoney and Pandian, 1992). These firm-specific and hard to imitate resources are embedded in the accumulated director's experience and knowledge about the firm and its environment (Krug and Aguilera, 2005). The processes of development and deployment of these governance resources- when combined with other firm resources in order to coordinate, to transform, to reconfigure and to integrate internal and external resources (Teece et al, 1997) - lead to superior board strategic and dynamic capabilities, such as that of making successful acquisitions, constituting therefore a valuable source of competitive advantage (Eisenhardt and Martin, 2000).

Finally, empirical evidence shows that corporations, whose directors participate in their strategic decision making processes, tend to have better financial results (Judge and Zeithaml, 1992; Baysinger and Hoskisson, 1990; Pearce and Zahra, 1991). Board involvement in strategy is associated therefore with firm performance, and while resource allocation decisions, such as, acquisitions may involve changes in firm strategic directions (Karim and Mitchell, 2000; Capron and Mitchell, 1998; Capron and Anand, 2007), management would need board counsel and advice provided by experienced directors with an active involvement in the acquisition programs. However, Board involvement in strategic decision making processes and its dynamics that make efficient use of directors' resources could be highly affected by board and management demographic similarity or dissimilarity.

The Top Management Team (TMT) tradition of the Upper Echelon Theory (Pfeffer, 1983; Hambrick and Mason, 1984; Cannella and Hambrick, 1993; Finkelstein and Hambrick, 1996; Ireland and Hitt, 1999) have extensively studied the role of demographics in group dynamics and interpersonal or inter-groups interaction within organizations. Rooted in social psychology, demographic similarity may lead to interpersonal attraction, consensual validation (Byrne et al, 1966; Westphal, 1998), self-identity and self-esteem derived from group membership. Thus, and according to this perspective, CEO's are more likely to attract directors having similar

demographic characteristics in order to preserve their influence and power over their boards (Westphal and Zajac, 1995).

Regarding acquisitions, Hitt and Tyler (1991) found that dissimilarity in executives' functional background lead to divergent evaluations of potential acquisitions, while Westphal and Zajac, (1995) argued that demographic similarity hindered board ability to objectively evaluate CEO decisions or to constructively challenge strategies proposed by firm's management. Similarity will reflect, therefore, the power dynamics between the board and the CEO. In addition, (Korn et al, 1992 in Mililken and Martins, 1996) reported a positive relationship between functional diversity of the top management team and firm's performance measured by its ROA. Our main argument in linking functional distance with board strategic capabilities and therefore with the strategy processes and dialogue of Pillar II, in the Value Creating Governance perspective, is the interesting findings reported by Simons (1995) who asserted that functional diversity will only influence positively organizational performance when the team uses decision processes that *allow debate*. Thus, Functional distance between The CEO and the Board could be used as a proxy for *Board strategic capabilities* that reflect the use of board resources along with effective strategy processes and constructive debate between the Board members and the CEO.

However, demographic similarity or dissimilarity measures are generally conceived as a composite index aggregating three components at the same time, that is, functional distance, educational distance, and age distance, which could hinder the interplay and sometimes contradicting and relative impact of each one of these components. As a result, we prefer to separate the impact of the three dimensions, given that while functional background distance and age could exert a positive effect on strategic making decisions, educational distance (generally measured as education level distance and not educational curricula) will exert a negative effect, while similarity could exert a positive one when boards and CEO have the same level of education. Following these arguments we formally state that:

Hypothesis 15 (H15): Higher functional background distance between the Board of Directors' members and the CEO will positively and significantly impact the probability of making successful acquisitions.

Hypothesis 16 (H16): Higher educational level similarity between the Board of Directors' members and the CEO will positively and significantly impact the probability of making successful acquisitions.

Hypothesis 17 (H17): Higher age distance between the Board of Directors' members and the CEO will positively and significantly impact the probability of making successful acquisitions.

Hypothesis 18 (H18): In the case of successful acquisitions, higher functional background distance between the Board of Directors' members and the CEO will positively and significantly impact the post-acquisition economic performance.

Hypothesis 19 (H19): In the case of successful acquisitions, higher educational level similarity between the Board of Directors' members and the CEO will positively and significantly impact the post-acquisition economic performance.

As discussed in section 2.1.2.3, family firms imply some distinct characteristics from the widely held firm and tend to exhibit higher performance than the former ones. Indeed, and according to King and Santor (2008), quoting the statement of Stein (1989):

"Family firms may make better investment decisions, since families have more firm-specific knowledge, are less myopic and have longer investment horizons" (p. 2424).

Furthermore, and following the review of some major empirical evidence on the benefits of family-controlled firm, Allaire (2006) concluded that:

"No matter how one slices the empirical evidence, there emerges a compelling support for the value-creating role of founders as CEO, chairman and controlling shareholder. The benefits of board of directors with very large stakes in the company are clearly established. These benefits are enhanced when the company can count on independent-minded directors who are conscious of their role as arbiters between the interest of majority and minority shareholders. These board members must ensure that no private benefit is extracted from the company by the controlling shareholders" (2006: p.24).

On the other hand, while Miller and Miller-Le Breton, (2006) argued that the presence of multiple family members on the top management team may correlate positively with financial performance, Miller et al (2007) showed that only lone founders family firms (i.e firms where the founder is the largest shareholder who is also the CEO, the Chairman of the Board or both, and in which there are no other of his relatives involved in the firm businesses) outperform the other forms of ownership among the U.S *Fortune* 1000 companies.

Furthermore, Miller and Le Breton-Miller (2006) hypothesized that family firms run by a family member as the CEO may exhibit *"fewer shortsighted acquisitions and downsizing decisions and more R&D, training and capital expenditure, and thus more distinctive capabilities that produce higher long-term financial return"* (2006, p.79). However, this proposition was not empirically tested by the authors. Following this discussion we formally propose that:

Hypothesis 20 (H20): Boards with a Lone Founder as chairman will positively and significantly impact the probability of making successful acquisitions.

From the RBV perspective, administrative groups should be considered more than a collection of individuals working together, and the experience these individuals gain from working with the firm and with each other will enable them to provide unique and valuable services within this particular group (Penrose, 1959). Furthermore, and as discussed in chapter 2, capabilities result from the combination of physical, human, technological and reputational resources developed over time (Amit and Shoemaker, 1993; Winter, 2003; Conner, 1991).

In addition, *Dynamic capabilities* derive from the *patterned experience of individuals involved in the decision making or deployment of the capability* (Helfat et al, 2007). However, board tenure was associated with weak governance (Vance, 1983) due to inertial forces and group conformity to norms (Johnson et al, 1993). *Heterogeneous tenure* is, at the opposite, considered as having a positive effect on board activeness and tends to reduce the effect of inertia and groupthink, along with providing a greater diversity of perspectives (Michel and Hambrick, 1992; Johnson et al, 1993). Thus, higher levels of Board heterogeneous tenure may indicate the degree of board activeness, which lead us to the following proposition:

Hypothesis 21 (H₂₁): Boards with heterogeneous tenure will positively and significantly impact the probability of making successful acquisitions.

To select potentially successful acquisitions, both monitoring and strategic capabilities should be involved (Weston et al, 1998; Sudarsanam, 2003). However, the literature of M&A have highlighted only the monitoring role as the most important one for the board and considered strategy role as a *nice to have* and not necessarily as an important determinant of acquisition success. At the opposite, we consider board of directors as an important determinant of choosing potentially successful acquisitions, which lead us to the following proposition:

Hypothesis 22 (H₁₀): The effects measured throughout hypotheses (H₁₅ and H₁₆) will be stronger than, or at least comparable to the effect measured in hypothesis (H₁₂).

Figure 3.2 depicts the components of our conceptual model, along with their relations and effects as hypothesized herein. The four pillars of the value creating governance perspective (Alaire and Firsirotu, 2003; 2009), that is, Board *legitimacy* and *credibility*, along with strategy processes based on relevant *board strategic capabilities* and the use of financial and strategic information and the setting of a calibrated compensation system based on relevant *monitoring capabilities* are conceived as governance resources and capabilities that may significantly discriminate successful acquisitions from unsuccessful ones. In the case of

successful acquisitions we will assess the relationships between the same governance components and firm value creation in the form of economic post-acquisition performance measured by the improvement in firm ROA following the studied acquisition.

3.4. Chapter summary

In this chapter, we reviewed the literature of M&A activities, their types and motives, their impact on firm value and the role that directors are supposed to play in the specific contexts of acquisitions. In summary, M&A activities, viewed from the economic and strategic perspectives, are motivated by synergistic gains that come from scale and scope economies, market power, complementary resources and capabilities, resource deployment and transfers, relatedness and unique or difficult to replicate cash flows that stem from this relatedness. M&A could be also motivated by the will of undertaking path-breaking changes and could take the form of horizontal, vertical, concentric (i.e. related), or conglomerate (i.e. unrelated) mergers. The literature review shows mixed results on the impact of M&A on the acquirers' post-merger performance, and the majority of the studies concluded that M&A destroy acquirers' shareholder value. However, Canadian evidence seems to be slightly different from what is found in the U.S studies, reporting in the most of the cases, significant and positive abnormal returns for the acquirer.

In addition, we discussed how M&A failure in creating value for the acquirer was largely explained by the existence of corporate governance problems such as managers going unchecked by their boards and seeking to obtain, through M&A, private gains, higher compensation, prestige, job security and human capital risk reduction, and how these failures could be also explained by strategic and organizational weaknesses, such as the lack of a clear strategic vision, management overconfidence and/or inexperience in evaluating potential synergies, in negotiating and/or integrating efficiently the acquired entities that may impede value creating for shareholders, even in the absence of opportunistic behaviour from the part of the agent.

Furthermore, we concluded that the evidence on the relationship between board of directors and firm performance was highly mixed and that these results could have been caused by several factors, such as the adoption of a single and aggregate measure of board independence or the consideration of only the monitoring role of boards, without considering their strategy role and the impact of board resources on firm performance.

To conclude, we will now turn to our research questions, formulated in chapter 1 and link them to the hypotheses developed herein. Indeed, we proposed four research questions as follow:

Research question 1 (Q1):

Q.1.1: Is Board Legitimacy related to acquisitions' success?

Q 1.2: If Board Legitimacy is related to acquisitions' success, how does it affect post acquisition- economic performance?

Research question 2 (Q2):

Q 2.1: Is Board Credibility related to acquisitions' success?

Q 2.2: If Board Credibility is related to acquisitions' success, how then does it affect post acquisition- economic performance?

Research question 3 (Q3):

Q3.1: Are Board monitoring capabilities related to acquisitions' success?

Q3.2: If Board monitoring capabilities are related to acquisitions' success, how then do they affect post acquisition economic performance?

Research question 4 (Q4):

Q 4.1: Are Board strategic capabilities related to acquisitions' success?

Q 4.2: If Board strategic capabilities are related to acquisitions' success, how then do they affect post acquisition economic performance?

Research question 5 (Q5):

What are the relative impacts of board monitoring and strategic capabilities on acquisitions' success?

Therefore, linking the thesis hypotheses with the research questions could be summarized as follow: hypotheses H₁, H₂, H₃ and H₅ address the research question Q 1.1, while hypotheses H₄ and H₆ address the research question Q 1.2 and H₇, H₉ and H₁₁ address research question (Q 2.1). Hypotheses H₈ and H₁₀ are related to research question Q 2.2. Hypotheses H₁₂, H₁₄, address research question Q 3.1 and H₁₃ is related to research question Q 3.2.

As for Hypotheses H₁₅, H₁₆, H₁₇, H₂₀ and H₂₁, they address research question Q4.1, while Hypotheses H₁₈ and H₁₉ aim to answer research question Q 4.2 and Hypothesis H₂₂ addresses research question Q 5.

Finally, the link between the theoretical dimensions of our framework, the research questions and the hypotheses formulated in this chapter and the theories from which they are derived are presented in Table 3.1.

Efficient Resource allocation decisions as a competitive advantage and their impact on performance

Value creating Governance Pillars based on Board strategic and monitoring capabilities

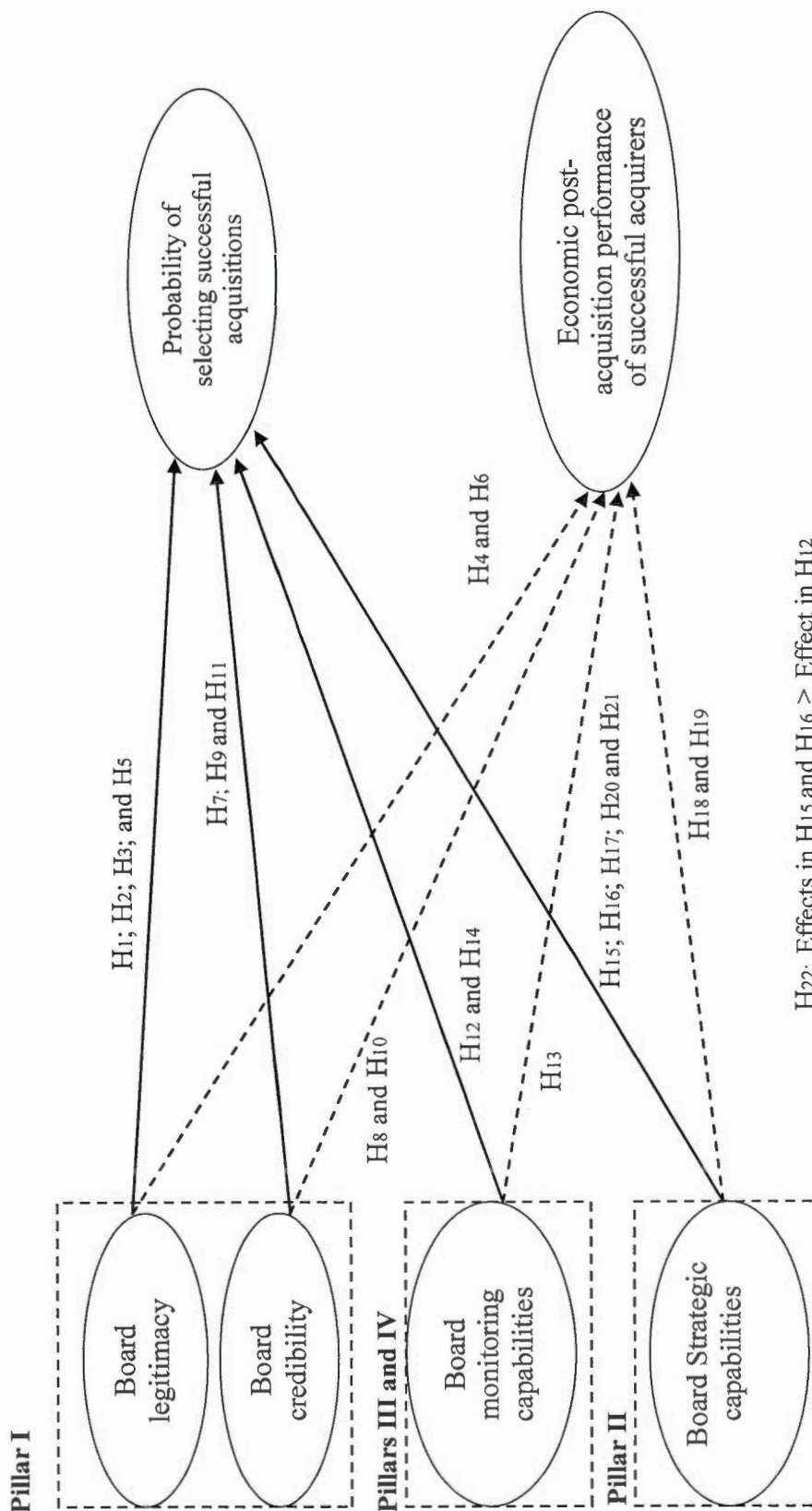


Figure 3.2: Conceptual model linking Value Creating Governance pillars, board capabilities and firm ability to select successful acquisitions.

Table 3.1: Summary and linkages between the thesis conceptual dimensions, research questions, hypotheses and theories involved
Theories discussed in Chapters 2 and 3

Dimension	Research Question	Hypotheses	Theories involved
Board Legitimacy	<i>Q.1.1: Is Board Legitimacy related to acquisitions' success?</i>	<i>Hypothesis 1 (H1): Legitimacy based on the independence of board members is negatively related to success of acquisitions.</i>	<i>Agency Theory; Value Creating Governance Perspective.</i>
		<i>Hypothesis 2 (H2): Legitimacy based on shares owned by outsider Board members is not necessarily related to success of acquisition.</i>	
		<i>Hypothesis 3 (H3): Legitimacy that stems from effective board selection processes will enhance the probability of making successful acquisitions.</i>	
		<i>Hypothesis 5 (H5): Legitimacy that stems from Boards with financially committed shareholder representation will significantly discriminate between successful and unsuccessful acquirers.</i>	

	<p>Q 1.2: If Board Legitimacy is related to acquisitions' success, how does it affect post acquisition-economic performance?</p>	<p>Hypothesis 4 (H4): In the case of successful acquisition, Legitimate Boards with effective board selection processes will positively and significantly impact post-acquisition economic performance.</p> <p>Hypothesis 6 (H6): In the case of successful acquisition, Legitimate Boards with financially committed shareholder representation will positively and significantly impact post-acquisition economic performance.</p>	<p>Agency Theory; Value Creating Governance Perspective.</p>
	<p>Q 2.1: Is Board Credibility related to acquisitions' success?</p>	<p>Hypothesis 7 (H7): Board credibility based on directors' background diversity will positively and significantly enhance the probability of selecting a successful acquisition.</p> <p>Hypothesis 9 (H9): Board credibility based on collective board members industry specific experience and</p>	<p>Sociocognitive Branch of the institutional theory; Stewardship theory; Resource Dependency; RBV; Value Creating Governance Perspective.</p>

<p>Board Credibility</p>	<p>Q 2.2: If Board Credibility is related to acquisitions' success, how then does it affect post acquisition-economic performance?</p>	<p>knowledge will positively and significantly enhance the probability of selecting a successful acquisition.</p> <p>Hypothesis 11 (H11): Boards with a majority of members holding multiple directorships are negatively related to the probability of selecting a successful acquisition.</p> <p>Hypothesis 8 (H8): In the case of successful acquisitions, Board credibility based on directors' background diversity will positively and significantly impact post-acquisition economic performance.</p> <p>Hypothesis 10 (H10): In the case of successful acquisitions, Board credibility based on collective board members industry specific experience and knowledge will positively and significantly impact post-acquisition economic performance.</p>	<p>Agency theory; Stewardship theory; Resource Dependency; RBV; Value Creating Governance Perspective.</p>
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<p style="text-align: center;">Board Monitoring Capabilities</p>	<p>Q3.1: Are Board monitoring capabilities related to acquisitions' success?</p>	<p>Hypothesis 12 (H12): Board of directors monitoring capabilities involving efficient audit and compensation committees, the availability of financial and accounting expertise, and solid previous experience in resource allocation decisions through board members will significantly enhance the probability of selecting a successful acquisition.</p> <p>Hypothesis 14 (H14): Family controlled firms with board members appointed on the board and those using dual class shares will not significantly impact the probability of making successful acquisitions.</p> <p>Hypothesis 13 (H13): In the case of successful acquisitions, boards with audit committees having higher proportion of directors possessing financial and accounting skills will positively affect firm financial and operating post-acquisition performance.</p>	<p>Agency theory; Stewardship theory; Resource Dependency; RBV; Value Creating Governance Perspective.</p>
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<p>Board Strategic capabilities</p>	<p>Q 4.1: Are Board strategic capabilities related to acquisitions' success?</p>	<p>Hypothesis 15 (H15): Higher functional background distance between the Board of Directors' members and the CEO will positively and significantly impact the probability of making successful acquisitions.</p> <p>Hypothesis 16 (H16): Higher educational level similarity between the Board of Directors' members and the CEO will positively and significantly impact the probability of making successful acquisitions.</p> <p>Hypothesis 17 (H17): Higher age distance between the Board of Directors' members and the CEO will positively and significantly impact the probability of making successful acquisitions.</p> <p>Hypothesis 20 (H20): Boards with a Lone Founder as chairman will positively and significantly impact the probability of making successful acquisitions.</p>	<p>Sociocognitive Branch of the institutional theory; Stewardship theory; Resource Dependency; RBV; Value Creating Governance Perspective.</p>
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		<p>21 (H21): Boards with heterogeneous tenure will positively and significantly impact the probability of making successful acquisitions.</p> <p>Hypothesis 18 (H18): In the case of successful acquisitions, Higher functional background distance between The Board of Directors' members and the CEO will positively and significantly impact the post-acquisition economic performance.</p> <p>Hypothesis 19 (H19): In the case of successful acquisitions, Higher educational level similarity between the Board of Directors' members and the CEO will positively and significantly impact the post-acquisition economic performance.</p> <p>Hypothesis 22 (H22): The effects measured throughout hypotheses (H15 and H16) will be stronger than, or at least</p>	<p>Sociocognitive Branch of the institutional theory; Stewardship theory; Resource Dependency; RBV; Value Creating Governance Perspective.</p>
<p>Q 4.2: If Board strategic capabilities are related to acquisitions' success, how then does it affect post acquisition economic performance?</p>			
<p>Research question 5 (Q5): What are the relative impacts of board monitoring and strategic</p>			

<p>Relative impact of Board monitoring and strategic capabilities</p>	<p>capabilities on acquisitions' success?</p>	<p>comparable to the effect measured in hypothesis (H12).</p>	
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CHAPTER IV

EPISTEMOLOGICAL POSITION, METHODOLOGY AND MEASUREMENT MODELS

In this chapter we will precise our epistemological ground, describe our data collection and sampling methods, the variables and the statistical models to be used for testing our formal hypotheses presented in chapter 3.

4.1 Epistemological Position:

Our research is grounded in the post-positivist tradition (Popper, 1972; Kuhn, 1962), more specifically, in the *Scientific Realism* movement (Putnam, 1990; Boyd, 1984; Hunt, 1991; 2005; Corman, 2005). This epistemological choice was based, first, on the fact that our theoretical model contains latent dimensions such as *Legitimacy*, *Credibility* and *Capabilities* which cannot be accommodated in a strict Logical Positivist tradition (Hempel, 1965). Furthermore, several authors consider that post-positivism provides a suitable framework to develop a useful social science (Alexander, 1995; Allaire, 1984), while Merton (1967) claims that both grand-

theories, middle range theories and working hypotheses can be included and tested by the normative standards of post-positivism.

The second argument for the adoption of the *Scientific Realism* as an epistemological ground was based on the nature of our research questions and our theoretical model derived from the Value Creating Governance perspective (Allaire and Firsirotu, 2003; 2004; 2009) that integrates and reconciliates various concepts encountered in theories such as the agency theory, the resource dependence theory, the Resource Based View perspective and the institutional theory which from a strictly logical positivist view could not be even considered as theories because their key constructs are largely based on unobservable factors (Godfrey and Hill, 1995).

The third argument was the fit between our research conceptual model and the principles of scientific realism advanced by Hunt and Hansen (2008):

- (1) The correspondence between the *observable* and the *unobservable* terms is suitable to our attempt in assessing our theoretical dimensions with measurable variables, what the authors call *inductive realism*;
- (2) Without discarding the falsificationism advocated by Popper (1972) and consisting in the irrelevance of positive results for science, we consider as Hunt and Hansen (2008) stated that "*the positive results of empirical tests-not just falsifications-provide evidence as to the truth content of the theories tested*" (2008: p:16);
- (3) By adopting scientific realism, we accept the *fallibility* of scientist's perceptual and measurement processes in the testing for the truth-content of knowledge-claims;
- (4) The adoption of a fallibilistic realism that rejects the concept of "*know with certainty*" and the confusion between what is true and what is certain in the scientific inquiry.

Put together, these arguments make *Scientific Realism* a relevant epistemological ground that supports our conceptual model presented in the

precedent chapter, and which will serve as the reference for our empirical models and the interpretation of our results and their theoretical implications.

4.2 Data Collection and sample:

The sample for the present study was derived from the Crosbie and co's FPinformat database and covered the period beginning in January 2000 and ending in December 2006.

The selection procedure was as follow: To begin, only acquiring firms meeting the following criteria were retained in our sample: (1) Public deals made between Canadian publicly traded companies; (2) large deals with a value of more than \$10 million; (3) acquisitions aiming a majority control; (4) acquisitions that do not involve share buybacks operations, operations made by or involving mutual funds, real estate assets, trusts or other type of financial or real estate funds; (5) acquisitions that have been completed within this time frame. A sample of 374 transactions was initially identified, from which we retained only the transactions fulfilling the conditions above and where the total sales of the target represents 10% of the acquirer's total sales (Franks et al, 1991; Tosi and Gomez-Mejia, 1989; Wright et al, 2002) and/or the target market value represents at least 10% of the acquirer's value. We ended with a sample of 133 acquisitions that fulfilled all the criteria discussed above.

Data on the variables included in the empirical model proposed in the next sections were hand collected from company proxy statements available on the *Sedar Database* and other public documents for information on directors, executives, firm activities, Businesses and strategies, while financial and accounting data were gathered by using *Mergent online Database*, *Stockguide*, *Chass@TSX*, *Dun & Bradstreet database*. Information on acquisitions was also gathered from *Financial Post Crosbie Mergers and Acquisitions in Canada*.

Biographical data on some 1084 Directors and about 398 Executive managers composing our sample (excluding multiple occupations by managers and

directors if any) were hand collected, then carefully analysed and cross checked from various sources such as *Companies' Management Information circular available in Sedar, Business Week, Reuters, Zoominfo.com, NNDB and Marketvisual.com*.

As discussed in Chapter 1, the main objective of the present thesis is to identify which governance attributes or capabilities will predict better a success of an acquisition. The first conceptual model presented in figure 5 (plain arrows), which is based on Allaire and Firsirotu (2003; 2004; 2009) Value-Creating Framework of Governance, aims to test hypotheses H₁, H₂, H₃, H₅, H₅, H₇, H₉, H₁₁, H₁₂, H₁₄, H₁₅, H₁₆, H₁₇, H₂₀, H₂₁ and could be expressed through the following empirical relationships:

$$(1) \text{Probability(Selecting Successful acquisitions)} = f([Board \text{ Legitimacy}]; [Board \text{ Credibility}]; [Board \text{ monitoring capabilities}]; [Board \text{ strategic capabilities}])$$

The second model presented in figure 5 (dashed arrows) aims to identify the impact of governance attributes and capabilities on the financial and operating post-acquisition performance within the group of successful acquirers through the assessment of hypotheses H₄, H₆, H₈, H₁₀, H₁₃, H₁₈, H₁₉ and H₂₂, and could be expressed by the following empirical relationships:

$$(2) \text{Post-acquisition performance} = f([Board \text{ Legitimacy}]; [Board \text{ Credibility}]; [Board \text{ monitoring capabilities}]; [Board \text{ strategic capabilities}])$$

4.3. Theoretical dimensions, Variables definition and empirical models:

4.3.1 Independent variables

For our study, the first dimension is *Legitimacy* and as described in chapter 3, it reflects how directors are selected and nominated, what interests they hold in the

firm and whom interests they represent in the board of directors (Allaire and Firsirotu, 2003), which may indicate their degree of motivation to actively involve themselves, at least, in the fulfillment of their fiduciary role. To capture board *legitimacy* we rely on four indicators: (1) *Quality of the selection and nomination processes (Qualsnp)*; (2) *Non-Executive Directors ownership (NEDown)*; (3) *Shareholder representation on the board: (SignShareholder) and (SignShareholderRep)*; (4) *Board composition (Boardcomp)*; (5) *NED ownership relative monetary value (NEDownvalue)*

- *Quality of the selection and nomination processes (Qualsnp)*:

To assess the quality of selection and nomination processes (*Qualsnp*) we use a multidimensional scoring based on the examination of the attributes and practices of the nomination committee. Nomination committees with established working procedures are seen as important institutional mechanisms that improve directors' selection and independence (Ruigrok et al, 2006). Although the nominating committee is not required by the Sarbanes-Oxley Act, such as the case of the Audit Committee, Carver (2006) considers it a "...a proper governance committee" and as "the only board committee that may need to be described and empowered in the bylaws" (2006, p.235).

Therefore, and based on the recommendations on the disclosures regarding nominating committee functions and communications between security holders and Board of Directors (SEC, 2004), we retained the ones widely used by Canadian companies and for which there is some degree of variance for the *Qualsnp* variable, and we score them as follows:

1. Existence of a nominating (or governance committee) with a clear mandate and specific charter (0 none- 1 if there is one)
2. Existence of a clear description of the selection process (0 none- 1 depending on the clarity and the extensiveness of the reported details related to the process)

3. The majority of the Committee members (more than 51%) seat on other firms' nomination committees (0 when the proportion is less than 51% and 1 otherwise).
4. Existence or divulgation of an annually updated long-term plan for the composition of the board that take into consideration the strategic direction of the corporation, its risks and its opportunities and define the ideal mix of director's qualifications (0 none- 4 (1 for each of the four characteristics))
5. The majority of the committee members are outsiders independent directors (0 if < 51%; 1 if the proportion fall between 51% and 75% and 3 if it falls between 75% and 100%)
6. The CEO is a member of the nominating committee (0) otherwise (1).
7. The nominating committee use the services of external advisers (0 if there is no advisers - 1 otherwise)

The final measure is obtained by adding the scores of the seven items. Higher values represent a higher quality of the selection and nomination processes.

- *Shareholder representation on the board*

Canadian companies are known for having a controlled shareholding structure and according to a recent study by Allaire (2008), 53% of the corporations listed in the S&P/TSX, from which our sample is drawn, have at least one shareholder with 10% or more of the votes. These votes come generally from direct control or through dual-class structures.

As discussed in chapter 2, significant shareholders should be considered as legitimate directors that may play an important role in the firm corporate governance by imposing their authority on management (Allaire, 2008). To measure this

indicator, we used two dichotomous variables: (1) Existence of a Significant shareholder other than an investment fund *SignShareholder* (0/1); (2) Existence of a significant shareholder (controlling 10% or more of the firm equity) with a representative on the board *SignShareholderRep* (0/1).

- *Board composition (Boardcomp)*

Although shareholder representation on the board could constitute an important governance attribute, for board members to be really independent, it is recommended that more than the third of directors should be independent from both management and the controlling shareholders (Allaire, 2008). That is, if there is a controlling shareholder, the third of the board members should be elected only by the minority shareholders.

Thus, the *Boardcom* variable was computed as the number of board members that are independent from the management and from any significant shareholder divided by the total number of board members. Higher values indicate that the board possesses some significant degree of independence.

- *NED ownership (NEDown)*

Empirical evidence reports a significant positive impact of board share ownership on board independence and firm performance (Bothwell, 1981; Kesner, 1987; Kren and Kerr, 1997; Bhagat et al, 1999; Zajac and Westphal, 1995). Hence, board legitimacy will increase when the board members have higher interests invested in the firm. To measure this indicator we used the number of shares owned by all the acquirers' Non- executive directors (excluding the CEO) during the acquisition year divided by the total number of shares outstanding during the same year.

- *NED ownership relative value to total compensation (NEDownvalue)*

To complement the board ownership indicator introduced previously, we should take in consideration the relative value of this shares ownership for directors.

Some authors argue that director pay is generally influenced by the CEO, which may diminish board independence (Kosnik, 1990; Bebchuck and Fried, 2004). In the same vein, Ryan and Wiggins (2004) concluded that:

"...entrenched CEOs use their position to influence board of director compensation to consist more of cash than of equity-based awards, which reduces the incentives for directors to monitor the CEO's actions" (2004, p.522).

Conversely, Board ownership dollar value could constitute a powerful incentive for outside directors to exercise their authority over the management given that their interests are more aligned with those of their shareholders (Bhagat et al, 1999), especially if their stakes in the company represent for them a substantial direct investment at risk (Allaire and Firsirotu, 2003; 2006). Thus, we computed *the NED Ownership relative value* variable by dividing the monetary value of the acquirers' non-executive directors purchased and held shares on the total compensation they receive during the acquisitions year. Monetary value of purchased and held shares is measured by multiplying the number of shares actually received and paid by non-executive directors during the acquisition year by the average stock price during the same year. Total compensation includes generally the annual cash retainer, meeting fees, stock options, restricted stocks and deferred share units.

The second dimension in our model is *Board Credibility* and it refers to the availability of experienced and competent directors with a deep understanding of firm activities, contexts and specific issues (Allaire and Firsirotu, 2003; Allaire, 2008; Allaire and Firsirotu, 2009). To measure this construct, six indicators were adopted: (1) *Board general occupational diversity (Boarddiv)*; (2) *Board Industry-specific relative experience (BoardSpecExp)*; (3) *Board and Directors Busyness (BoardBus and (OverBoarded))*;

- *Board occupational background diversity (Boarddiv)*

Board with diversified backgrounds, expertise and knowledge are more likely to enhance board credibility as defined by Allaire and Firsirotu (2003; 2009). For Simons et al (1999, p. 663), functional backgrounds diversity variables possess the advantage of capturing conjointly experience, information, and perspectives relevant to cognitive tasks performed by the team members. Directors with different backgrounds bring different perspectives and opinions, complementary skills and knowledge (Forbes and Milliken, 1999), which facilitates advice and counsel (Baysinger and Butler, 1985; Hillman and Dalziel, 2003). Yet, some researchers argue that diversity could constitute a double-edged sword (Milliken and Martins, 1996) and while it provides boards with valuable resources it could induce "higher levels of conflicts, interaction difficulties and lower levels of integration" (Hillman and Dalziel, 2003, p.497-498).

Nevertheless, Murphy and McIntyre (2007) pointed out that contexts are important for valuing the positive effect of diversity:

"Clearly, when discussing diversity, the context is the central question, and with highly unstructured, complex issues to tackle, BOD may benefit from being comprised of demographically and skill diverse individuals representing various value positions and sources of expertise" (2007, p.215).

Thus, we could argue that in the context of M&A, Board of directors with diversified occupational backgrounds will contribute better in choosing successful acquisitions than those composed by directors having similar profiles.

To measure *Boarddiv* variable, we considered eleven occupational categories that is, *CEO, other executive functions, retired CEO, other retired executive, lawyer, banker, consultant, chartered accountant (or CGA, CMA), academic, former politician and former state functionary (civil servants)*. We then computed the heterogeneity index proposed by Blau (1977), that is, a variation the Herfindahl

index. This indicator is widely used to measure group diversity in social sciences (Finkelstein and Hambrick, 1996; Carpenter, 2002).

The heterogeneity index (HI) was obtained by using the following calculations:

$$HI = 1 - \left(\sum_{i=1}^k (ni/N)^2 \right)$$

Where:

ni = number of directors composing the occupational category (i)

N = number of directors composing the entire board.

k = number of occupational categories

In order to eliminate the effect of extreme values, and to ensure a normal distribution for the *BoardDiv* variable, the third step consisted in creating a modified index from the one used by Finkelstein and Hambrick, by taking the inverse of HI computed above ($1/HI$) and subtracting it from the highest value in the sample. Higher values of *BoardDiv* will indicate therefore a heterogeneous and well diversified board.

- *Board relative Industry-Specific Experience (BoardSpecExp)*

In addition to Board members' background diversity, Board *credibility* is largely attributable to the previous experiences of its members. Indeed, the nature and the level of human capital- defined as a set of abilities, expertise and knowledge acquired by an individual from previous work experience (Bailey and Helfat, 2003)- that directors bring to the board will largely affect the board credibility, especially if directors' previous experiences are industry-specific. These Industry specific experiences refer to an individual director's knowledge about an industry specific competitive conditions, consumer needs, technology and investment requirements, regulations, suppliers and other external stakeholders (Bailey and Helfat, 2003; Kor and MisanGyi, 2008). In a recent empirical study, Kor and Sundaramurthy (2008) concluded that:

"Prior experiential knowledge of the industry helps outside directors to develop a sophisticated and tacit understanding of the current and future industry dynamics, which in turn enables them to better evaluate manager's strategic proposals." (2008: p.17-18).

Furthermore, Directors' experiences are shaped by the industry context and specific strategic decisions in which these directors were involved in the past (Bluedorn et al, 1994). Thus, common and similar or highly related industry experience may provide directors with accurate and shared cognitive assumptions about the future tendencies in the industry and the course of action and alternatives needed to be taken (Hambrick and Mason, 1984), including the nature of acquisitions the firm should engage in (Hitt and Tyler, 1991).

Moreover, outside directors with relevant experiences are, not only, more likely to give better advice to managers, but are also more able to contest objectively management proposals (Carter and Lorsh, 2004). Another study by Kroll et al (2007) reported that advice and counsel of outside directors with industry experience affect positively firm performance. However, and as noted by McDonald et al (2008):

"...extant literature has given little consideration of the performance implications of directors' experience", moreover, they argue that *"...there have been few, if any, systematic efforts to conceptually elaborate this basic notion by delineating the nature and sources of directors' expertise, and by describing how that expertise might be linked to the relative success of specific firm strategic actions."* (2008: p.1156).

Here again, we hope that the present thesis will add some additional insights on this important issue of outside directors' previous experience and how it will enhance board credibility.

In order to measure outside directors' industry experience, previous research used the average number of managerial positions directors previously held in the same industry as the focal firm (Kor and Misangyi, 2008; Kor and Sundaramurthy, 2008). However, Kor and Misangyi (2008) noted that *"Yet the amount of advice and guidance that managers need from outsiders is likely to be a function of the availability of industry experience in the top management team"* (p. 1347) and given

that *credibility* deals with questions such as “Do members of the management team believe that discussions with the board are fruitful, bring new perspectives and viewpoints, add value to the decision process? Does management believe the board members really understand the business, its key metrics, and its success factors? (Allaire and Firsirotu, 2009: p.253-254), it is more fruitful to adopt a measure that captures the relative experience of the board vis-à-vis its management’s experience. Indeed, we can logically infer that boards with more or equivalent collective industry-specific experience, when compared to their management team, will possess more credibility than other boards with members having less or little industry experiences than their managers.

To measure Board relative industry-specific experience (*BoardSpecExp*), we used an alternative measure to the one used in the recent studies by Kor and Misangyi (2008) and Kor and Sundaramurthy (2008), by dividing the average of the number of previous managerial and Board positions held by outside directors in other firms having the same 2-digit NAIC industry code as the acquirer by the average of the number of the CEO and the three top managers’ previous positions held in the focal firm and/or in other firms having the same 2-digit NAIC code as the acquirer. Therefore, values higher than (or equal) to one will indicate more credible boards while values less than one will indicate a less credible board.

- *Board and directors Busyness: (BoardBus) and (OverBoarded)*

While the *BoardSpecExp* variable defined above aims to measure the effect of board collective relative experience in discriminating between successful and unsuccessful acquisitions, it would implicitly suppose that experienced directors holding at the same time multiple seats in different firms in the focal firm’s industry would have a positive effect on firm decision making processes and, ultimately, on firm performance. However, the effect of busy directors (i.e. directors having multiple directorships) on firm performance is not clear, and extant research have yielded contradictory conclusions.

We have included two variables that would factor for the effect of board busyness on the success or the failure of acquisitions. Indeed, there is a disagreement between researchers on the suitable way to measure directors' busyness. Thus, to test directors' busyness effect on firm performance, Ferris et al (2003) used the variable *Directorships by directors* measured as the total number of directorships held across all the directors on the Board divided by board size, while Fich and Shivdasani (2006) proposed a dichotomous indicator that take the value of one if 50% or more of the board's outside directors are busy (i.e. holding three or more board seats), and zero otherwise. The latter researchers showed that their indicator highlighted a stronger link between busy Boards and firm performance than the use of the average number of board seats as proposed by Ferris et al (2003). Finally, Harris and Shimizu (2004) used the number of busy directors (i.e. holding four, five, six or more board seats) divided by total board size to measure board busyness. For the purpose of our study we chose to use two other complementary indicators to account for the effect of multiple directorships:

(1) Board Busyness (*Boardbus*): a dichotomous variable as the one used by Fich and Shivdasani (2006) as described above;

(2) Director Busyness (*Overboarded*): a continuous variable as the one used by Harris and Shimizu (2004), that is, the number of busy directors holding 5 or more board seats divided by the total board size.

The third dimension in our model is *Board monitoring capabilities*. Organizational capabilities could be considered as the outcome of complex, team based productive activities that cohesively integrate the knowledge of many individual specialists (Grant, 1996). Furthermore, *Governance capabilities* was defined as the firm specific and difficult to imitate, corporate governance processes and board capacity to use the governance resources and competences available to it in order to achieve a competitive advantage by, at least, lowering effectively the agency costs, and ideally, by contributing to the enhancement of the firm's value creation. We may consider, therefore, that *Board monitoring capability*, as a subset of governance capabilities, is the outcome of complex, team based control activities

that integrate the knowledge of many directors having experience in monitoring management, and particularly the CEO, which may contribute to agency costs reduction. The efficient use of financial and strategic information along with setting a calibrated compensation system for management, which constitute the third and the fourth pillars of the value creating governance perspective (Allaire and Firsirotu, 2003; 2004; 2009) are highly improved by the existence of efficient Board monitoring capabilities, which ultimately contribute to create more value for firms that use them saliently.

Committees tend to play an important role in corporate governance (Lorsh and MacIver, 1989, Conyon and Peck, 1998). In addition to help the board overcome the constraints of time and complexity (Waldo, 1985; Lorsh and MacIver, 1989); committees deal with specific domains and tend to develop specialized expertise (Vafeas, 1999). In line with those considerations, Leblanc and Gillies (2005) observed that:

"...a good deal of the detailed examination of issues is done by board members at the committee level." (p.55). and "an ever increasing amount of the important work of the Board of directors is done by committees of the board. Indeed, being chair of the audit, compensation and the nomination committee involves the acceptance of great responsibilities and with the increasing regulations of companies an enormous amount of time" (2005: p.91).

Moreover, Monks and Minow (2004) stated that:

"In developed nations, it is fairly well accepted that many board functions are carried out by board committees. For example, a nominating committee, an audit committee, and a remuneration committee are recommended in Australia, Belgium, France, Japan, the Netherlands, Sweden, the United Kingdom, and the United States."

Furthermore, a recent survey by Korn/Ferry (2008) on Canadian boards indicates that the compensation and the governance/nomination committees were present in almost 93% of the 287 Canadian companies included in their survey, while the audit committee is present in all the surveyed companies. As for Charan (2005):

"Board committees play two vital roles: the first is to dig into complex subject matters, and the second is to keep the rest of the board up to speed in those areas...Committees bring recommendations to the full board, but the full board is the true decision maker" (p.59).

On the other hand, and in relation to empirical evidence on the effect of board committees on performance, Finegold et al (2007) noted in their extensive review of the literature on board committees that:

"With few notable exceptions (Xie et al, 2003 and Park and Shin, 2004) there has been very little work examining the operation and effect of board committees." (p.872), and that: "There has been very little analysis of how committee structure and operation relate to firm performance" (p. 873).

Audit and compensation committees are considered as the most important mechanisms of the Board monitoring function (Vance, 1983; Braiotta and Sommer, 1987; Kesner, 1988; LeBlanc and Gillies, 2005, Monks and Minow, 2004). Thus, we have used resources possessed by these two important committees to proxy the *Board monitoring capability* construct: (1) *Audit committee resources (Auditcom)*; (2) *Compensation committee resources (Compcom)*.

Finally, and following our discussion in section 2.1.2.3 on the specific governance features of family firms, we have also assessed if the presence of a controlling family member on the board enhances its monitoring capability and contribute therefore to discriminate significantly the successful acquirers from the unsuccessful ones. Thus, three other variables will be computed for that purpose: *FamilyControl*; *DualShares* and *FamilyBoard*.

- *Audit committee resources (Auditcom)*

From an agency perspective, audit committees oversight and intermediate the firm reporting activities that involve management and external auditors (Klein, 2002), which is supposed to enhance the integrity of firm's financial reporting (DeAngelo, 1981; Daily, 1996; Ellstrand et al, 1999).

Recent corporate governance reforms require audit committees to include members having financial literacy (Sarbanes-Oxley Act, 2002). Furthermore, acquisitions rely heavily on accounting information for evaluating the potential of acquiring a target (Harrisson et al, 1991).

During the 1990's, research on Audit committees were interested on how the existence and the voluntary adoption of audit committees affected the quality of firm financial reporting while during the 2000's, the focus was more on the effect of some characteristics, such as the expertise and background of committee members on firm financial reporting (Turely and Zaman, 2007) and on earnings management (Davidson et al, 2005; Vafeas, 2005, Koh et al, 2007).

Some prior research reported the existence of a significant association between the accounting and financial expertise of the Audit committee members and the firm's earnings quality and smaller discretionary current accruals (Xie et al, 2003; Dhaliwal et al, 2006), while others found that the appointment of a financial expert with accounting-related experience to the audit committee was associated with a positive cumulative abnormal returns (DeFond et al, 2005). To the best of our knowledge, there is no published study that investigated the effect of audit committee member's expertise on acquisition success or on post-acquisition performance.

However, we may suppose that audit committees with members having significant financial and accounting backgrounds and previous acquisition experience, developed through their participation in the boards of other firms, will enhance the board capability to actively monitor management decisions, including those related to acquisitions.

This indicator was measured as the number of the focal firm's audit committee members having financial, accounting and acquisition experience (The latter will be determined by examining each director's previous occupations and if he was in function when one of the firm involved made at least one acquisition) divided by the number of directors forming the entire committee.

- *Compensation committee resources (CompCom)*

According to the agency perspective, effective monitoring by boards should lead to the alignment of the management and shareholder interests through adequate pay packages and compensation policies (Jensen and Meckling, 1976; Fisher, 1986; Finkelstein and Hambrick, 1988; Zajac, 1990). Although it is the full board that ultimately decides on how management will be compensated, it generally relies on the recommendations submitted by its compensation committee to make its final decision (Lorsh and MacIver, 1989; O'Reilly et al, 1988; Daily et al, 1998; Vafeas, 2000; Bebchuck and Fried, 2006; Conyon, 2006; Conyon et al, 2009). Indeed, Main et al (2008) noted that:

"Whereas remuneration committees were once seen merely as an arms-length administrative device to ensure an acceptable degree of integrity in the setting of executive reward, they are now seen as key agents in the strategic human resource management process of choosing a remuneration package and arranging that it is calibrated in a way that ensures that it motivates the executive towards those decisions and actions necessary to best deliver the company's chosen strategy" (2008: p.227).

Thus, while the board decides ultimately on the top management remuneration, the compensation committee remains the king pin of the management pay process. In the light of the previous discussion, it seems meaningful to assess the monitoring capability of boards by examining the structure of these committees and by assessing the quality of the resources and processes embedded in them.

Several studies attempted to identify the determinants of an effective compensation committee and how some characteristics such as the composition of these committees, their size or their structure affect the level or the nature of the management pay (Daily et al, 1998; Newman and Mozes, 1999; Anderson and Bizjak, 2000; Cyert et al, 2002; Sapp, 2008; Sun and Cahan, 2009).

For the agency theorists, compensation committee members should be independent from the CEO and should have sufficient power to monitor managers through the pay mechanism (Core et al, 2003; Chatterjee et al, 2003; Jensen et al,

2004), while the managerial power theory advanced by Bebchuck and Fried (2004) argues that CEOs tend to neutralize this influence through their intervention (directly or indirectly) in the directors' selection and nomination processes, especially when the CEO is also the chairman of the board (Daily et al, 1998; Benchuck et al, 2002; Bebchuck and Stiles, 2004). Thus, directors appointed during the incumbent CEO period could be more influenced by the latter than those appointed before this period (Wade et al, 1990). Compensation committee with a large proportion of directors appointed during the incumbent CEO mandate is, therefore, likely less independent (even if there is no material relationship between the directors and the firm or its CEO, as suggested by the recent governance reforms) from the CEO and will poorly monitor him through adequate compensation packages (Daily et al, 1998; Bebchuck and Fried, 2004).

Given that our interest focuses on the governance factors that may discriminate between successful and unsuccessful acquisitions, assessing compensation committee effectiveness commands a further discussion on how the different compensation packages' components granted to top management affect the post-acquisition performance. Indeed, the committee members are those who recommended the remuneration package of the CEO, which provide him with the incentives to look for acquisitions and to make deals. Indeed, Datta et al (2001) concluded that CEO's with compensation packages characterized by low equity based components provided fewer incentives for managers to make value-maximizing decisions and induced them to acquire low-growth targets with high premiums.

For Hartzell et al (2004), managers receiving higher proportions of equity based compensation are more likely to make successful acquisitions than those who receive less equity based compensation, while Williams et al (2008) concluded their recent survey of the literature on the link between managers incentives and acquisitions by asserting that:

"Although the results are mixed, it also appears that managers with higher equity based compensation make better decisions regarding the wealth of shareholders and the merger strategy of the firm" and that "...Long term post-merger performance may be a function of managerial compensation" (2008: p.339).

In a more recent Canadian study by Bodolica and Spraggon (2009) on the relationship between the adoption of Long term incentives plans (LTIPs), and some other protection components (employment agreements, severance provision and golden parachutes clause) and post-acquisition performance, the authors argue that while the long term incentives plans (excluding stock options and restricted shares) push managers to make less risky acquisition decisions, the adoption of protection clauses tend to encourage them to do so, suggesting a substitution between the two components, which may lead boards to implement significant protection components on pre-acquisition period and more LTIPs on the post-merger period.

Although the authors attempted to identify the effect of acquisitions on the adoption of the one or the other form of compensation, which constitutes the reverse of what the present thesis aims to investigate, their conclusions imply however that the adoption, during the pre-acquisition period, of a balanced pay package in terms of both the LTIPs and the protection components could lead to a more balanced behaviour of the CEO and induce him to take decisions based on a reasonable level of risk, that of the equilibrium between his personal downside risk and upside potential incentives. Hence, we could argue that to induce the CEO to undertake a value creating deal, his pay package should contain a significant amount of the LTIP's components along with some protection features. Indeed, according to Milkovich et al (2007) (drawn from Bodolica and Spraggon, 2009), around 40% of the executive compensation in Canada is granted in the form of LTIPs. Buck et al, (2003) defined Long term performance plans as *grants of cash or shares (usually the latter) with performance conditions*.

Nevertheless, the problem with LTIPs resides in the nature of the metrics used to assess the conditional performance. Indeed, if the company base its conditions on the Earnings per Share (EPS) growth on a short period (less than three years), the manager will be induced to maximize stock price rather than

sustained firm economic value added (Allaire and Firsirotu, 2004; 2009) and as Allaire and Firsirotu (2009) pointed out:

"While investors and boards of directors generally believed that compensation systems are good at creating short-term value for shareholders, they soon realized that incentive systems are very tricky to design; even in the best of cases, compensation programs could enrich managers fortuitously and trigger exit strategies that are optimal for them but disruptive to the company" (p.91).

Some authors distinguish LTIPs from stock options and restricted shares (Kumar and Sopariwala, 1992; Westphal and Zajac, 1998; Burns and Kedia, 2006) arguing that while LTIPs reward managers when accounting performance goals are achieved in a period of three to five years, options could be exercised regardless of firm performance. Moreover, Kumar and Sopariwala, (1992) assert that:

"...Compensation from performance plans, being more directly linked to managerial performance than stock options plans, encourages managers to redirect their attention toward long-term profitability" (p. 563).

Therefore, we should expect that firms having a significant portion of the CEO pay tied to long-term accounting or economic performance (ROE, ROA, EVA, Sales growth...etc.) during the acquisition year will induce managers to make more successful acquisitions.

On the other hand, Directors' power and willingness to monitor top management could also come from their professional profile, business experience, compensation and tenure within the board (Westphal, 1998; Vance, 1983; Vafeas, 2003). Thus, committee members with large shareholding interests are likely to be more motivated to monitor tightly the management pay (Shivdasani and Yermack, 1999; Cyert et al, 2002, Conyon and He, 2004).

In addition, committee members with extensive experience in setting management remuneration will enhance the monitoring quality of the compensation committee (Fama, 1980; Jensen and Fama, 1983; Kaplan and Reishus, 1990; Harford, 2003). Thus, a large proportion of the compensation committee members

that have (or had) also a seat in other firms' compensation committees will more likely enhance the quality and the effectiveness of the incumbent firm compensation committee.

Finally, Director Seniority could also add some effectiveness to the compensation process (Vafeas, 2003, Sun and Cahan, 2009) suggesting that a larger proportion of senior directors (i.e. being for a long period of time as a director in general) will enhance its ability to monitor managers through the pay processes and packages.

Through the lens of the previous discussion, we may expect that an effective compensation committee will contribute to the board monitoring capabilities, and therefore contribute to induce managers in seeking successful acquisitions, if it is characterized by:

- 1- *A majority of members appointed before the incumbent CEO takes his position;*
- 2- *A current pay package of the CEO that comprise a substantial amount tied to the long term firm accounting and economic performance achievements, which signals the soundness of the committee's propositions and its effective influence on the pay process;*
- 3- *The existence of some protection components such as severance provisions, employments agreements and golden parachute clauses;*
- 4- *Members having large shareholding interests;*
- 5- *Directors sitting (or have set in the past) in other firms' compensation committees;*
- 6- *A majority of senior members with experience as board directors in general.*

In our attempt to assess the monitoring effectiveness of the compensation committee, we have used a composite score following a similar approach to the one used by Sun and Cahan, (2009), but it differs in term of the nature of the components to be used in the computation of the final score. Indeed, and on the

basis of the arguments presented in the previous discussion, the second composite measure that reflects the effectiveness of the board monitoring capability through the quality of its compensation committee, *CompCom* score, will be computed for each acquirer as follows:

- 1- A score of 1 will be assigned if the number of directors appointed to the compensation committee during the incumbent CEO period divided by the total committee members is less than the sample median value of this measure, otherwise the score is 0.
- 2- A score of 1 will be assigned if the value of the LTIP component linked to long term accounting and economic performance measures such as ROA, ROE, EVA, Sales Growth,...etc. (Excluding short term bonuses, salary, stock options, restricted shares and other components based on share price performance) divided by the CEO total pay is greater than the sample median value of that measure, otherwise the score is 0;
- 3- A score of 1 will be assigned if the CEO pay package of the acquiring company contains at least one of the following protection components: severance provision(s), employment agreement(s) or golden parachutes clause (s) otherwise the score is 0. If the company use at least one of the aforementioned protection components while having a score of 0 in #2 above, then the score for the present variable will be 0.
- 4- A score of 3 will be assigned if the number of shares actually purchased and held by the committee members divided by the total shares actually purchased and held by the entire board members is greater than the sample median value of that measure, otherwise the score is 0;
- 5- A score of 3 will be assigned if the number of committee members sitting on other firms' committees divided by the total committee members is greater than the sample median value of this measure, otherwise the score is 0;
- 6- A score of 1 will be assigned if the number of committee members having at least 10 years' experience as directors in general is greater than the sample median value of this measure, otherwise the score is 0.

The final composite measure of the *CompCom* variable will be computed as the sum of the six individual scores. Thus, higher values of the *CompCom* will indicate a higher qualitative contribution of the compensation committee in

enhancing the board monitoring capabilities, and consequently, its ability to induce managers to make successful deals.

As discussed in section 2.1.2.3 of the present thesis, the use of dual class share by family controlled firm is common in Canada (Gadhoum, 2006). While some studies found that firms using dual class shares, cross shareholding or pyramidal structures tend to perform more than the widely held firms, we may expect that the use of dual class share will contribute to enhance the board monitoring capability (Ben Amar and André, 2006) if the controlling shareholder is also a member of the board. Thus, family firms with concentrated ownership, using dual class shares and having a controlling shareholder or his relatives on the board will create a monitoring propensity with regard to how management chose and evaluate firm acquisitions deals (Carney, 2005).

Three other dummy variables were used therefore to proxy the board monitoring capability: (1) (*FamilyControl*) take the value of one when there is a family controlling more than 10% of firm voting shares and zero otherwise, (2) Family control with dual shares (*Dual Shares*) that takes 1 when the controlling family use also dual class shares and zero otherwise and (3) Family control with a representative on the board (*FamilyBoard*) that takes 1 if the controlling family has at least one of its members sitting on the company board of directors and zero otherwise.

The fourth and last dimension is the *Board strategic capabilities*. Indeed, and as discussed in chapters 2 and 3, the board of directors- according to the value creating perspective, the stewardship theory, the resource based view, the resource dependence and the institutional theories- is called to play an important and active role in firm strategy. Furthermore, the Board of directors should directly participate in the resource allocation decisions (Judge and Zeithaml, 1992; Shmidt and Brauer, 2006) and while these decisions reflects generally intended or unintended firm strategy (Mintzberg and Waters, 1985; Noda and Bower, 1996), it will also reflect the board capability added by the firm strategy making decisions. *Board strategic*

capability is generally embedded within firm processes, which are difficult to observe and measure by simple board attributes.

However, using relevant determinants that proved to contribute and positively affect group dynamics and strategy making processes could overcome this limitation. Thus, relying on previous studies using fine grained demographic dimensions based on social structural analysis (Pfeffer, 1983; Westphal, 1998) will help us to proxy the board strategic capability and its impact on the firm ability to select, negotiate and complete potentially successful acquisitions. Accordingly, we used six indicators to measure this construct: (1) *Functional distance between the Board and The CEO* (CEO-Board *FuncDist*); (2) Educational similarity between the Board and the CEO (CEO-Board *EducSim*); (3) Age distance between the Board and the CEO (CEO-Board *Age distance*); (4) *Lone Founder* (*LoneFound*); (5) *Lone Founder Chairman* (*LoneFoundChair*); and (6) *Board heterogeneity tenure* (*Boardten*).

- *Functional distance between the CEO and the board of directors* (CEO-Board *FuncDist*)

To estimate this indicator, we will use the same procedure as described in Westphal and Zajac (1995). However, and instead of using a composite continuous indicator of similarity integrating functional background, age and education, we will adopt three separate indicators to measure functional distance, educational level similarity and age distance.

The first step for computing the functional distance between Board members and the CEO consisted in creating categorical measures of functional backgrounds. Thus, three core categories were considered: (1) output functions: marketing and sales; (2) throughput functions: operations, R&D and engineering; (3) support functions: finance, accounting, primarily law, human resource and other administrative functions. Next, a categorical measure of functional backgrounds of each director is created and coded 1 if the director had primary experience in marketing and sales, 2 if the director had primary experience in operations, R&D or

engineering and 3 if the director primary experience is in finance, accounting, law, human resources or other administrative functions. When a director has experience in two functions falling in different categories, he was classified in the one in which he had the most experience. The same procedure is applied to the CEO of each acquiring firm. Data on this first measure was hand collected for about 1084 directors and CEOs by using multiple sources such as The *Financial Post Directory of Directors* Database, web multi-engine research using the *Copernic Agent Professional* software, *Zomminfo.com* database, NNDB.com, and *Business Week* to gather, to cross-check and to validate all the relevant biographical information available on a particular person.

The second step consisted in creating a dichotomous measure for each (Director-CEO) dyad based on the coding realized in the previous step. Thus, functional background similarity between a director and the CEO, (*CEO-Director*) *functional similarity*, will be coded 1 if the director and the CEO shared experience in the same functional area defined above and 0 otherwise.

In the third step we have computed the functional background similarity between the CEO and the whole board of directors (*CEO-Board*) *functional similarity*, as follow:

- (1) For each category of the functional background i (i = Output, throughput or support functions), a proportion of (CEO-Director) dyads sharing the i th category will be determined (i.e $P_{fbi} \text{ (CEO-Dir)} = \sum \text{ (CEO-Director) dyads sharing the } i\text{th Category} / \text{total of dyads}$);
- (2) A heterogeneity index similar to the Herfindhal measure will be computed as follow:

$$\text{CEO-Board functional Similarity index} = \sum (P_{fbi})^2$$

The final step consisted in computing the *CEO-Board Functional distance* variable, to be used in our empirical models, which was obtained by subtracting the (*CEO-Board*) *functional similarity* computed in the previous step from the highest value in the sample. Thus, higher values indicate higher distance, which is hypothesized as being a source of the board ability to objectively evaluate CEO decisions and challenge strategies proposed by management, including the decisions about acquisitions (Westphal and Zajac, 1995; Westphal, 1998).

- *Educational Similarity between the CEO and the board of directors (CEO-Board EducSim)*

As in the case of the Board-CEO functional similarity, the first step in computing the Educational Similarity between Board of directors and the CEO consisted in defining a categorical measures coded as (1), when the director has less than a bachelor's degree; (2) if he has less than a master degree; (3) if he has less than a doctoral degree and (4) if he owns a doctoral degree. A similar measure will be created for each acquirer's CEO.

For educational level similarity, the same procedure as the one used for the CEO-Board functional similarity will be performed to determine the CEO-Board educational similarity index:

$$\text{CEO-Board educational Similarity index} = \sum (P_{ebi})^2$$

Where:

P_{ebi} = the proportion of CEO-Board dyads sharing the same educational level i
 i = less than a bachelor degree, less than a master degree, less than a doctoral degree or a doctoral degree.

Instead of using the educational distance as, for functional background, we used the *CEO-Board educational Similarity* index as the variable to be used in our empirical models. Indeed, and given that our categories reflect the level of education

rather than the academic disciplines, we consider that educational level similarity, rather than educational level distance, will have a positive effect on strategic making decisions through the positive influence on the CEO (Bantel and Jackson, 1989; Wiersema and Bantel, 1992; (see Westphal and Zajac, 1995); Judge and Ferris, 1993; Tsui and O'Reilly, 1989

- *Age Distance between the CEO and the board of directors (CEO-Board Age Distance)*

For age distance, the index was computed as the Euclidian distance measure commonly used in research on organizational demography (Westphal and Zajac, 1995; Westphal, 1998; O'Reilly et al, 1989):

$$\begin{aligned} &\text{Age distance (CEO-Board)} \\ &= \\ &[\sum(\text{CEO age-Board member } i \text{ age})/\text{number of board members}]^{(-1/2)} \end{aligned}$$

In order to assess the effect of the family firms, prevalent in the Canadian context, we used two additional binary variables to proxy for board strategic capabilities, which we expect to discriminate in a significant way successful from unsuccessful acquisitions: (1) Lone founder variable (*LoneFound*) which take the value of one when the founder sits on the board of the family firm and in which no one of his relatives is involved in the firm top management or as a board member and zero otherwise; (2) Lone founder Chairman variable (*LoneFoundChair*) which takes the value of one when the firm has a founder as the Chairman of the board with no other relatives involved in the firm top management or as board members, and zero otherwise.

- *Board heterogeneity tenure (Boardten)*

This indicator will be measured by the coefficient of variation (standard deviation divided by the mean) of the number of years served by the non-executive board members (Johnson et al, 1993), which could be formulated as follow:

$$Boardten = (\sigma \text{ of board tenure} / \text{board tenure mean})$$

Higher values indicate higher levels of heterogeneous tenure and therefore a higher activeness of the board.

4.3.2 Dependent variables

Our first dependent variable to be used for the conceptual model presented in figure 5 (depicted with plain arrows) is the probability to *select successful acquisitions (AcquSuccess)*. Indeed, efficient resource allocation decision processes will lead to select successful acquisitions and to maximize the chances for achieving post-merger performance and create value for the acquirers' shareholders (Sirower, 1997). However, what constitute a successful acquisition is not always that simple.

As noted in chapter 3, post-merger performance is puzzling and the evidence on the post-merger performance of the acquirer yielded highly mixed results. Furthermore, the Canadian evidence seems to be somewhat different from the one that stems from US studies, suggesting a slight positive and significant post-acquisition performance for Canadian acquirers. In addition, the use of short-term and long term perspectives, along with the use of market based or accounting based measures, rendered difficult the comparisons between results and the adoption of the most suitable one. Consequently, and rather than linking directly the level of the post-performance outcomes to the governance attributes, we will assess which governance attributes are more likely to discriminate successful acquisitions from the unsuccessful ones.

Furthermore, and as discussed previously, retention and divestment of a recently acquired firm reflects acquisition success or failure (Porter, 1987; Bergh,

1997; Boot, 1992; Kaplan and Weisbach, 1992). Others authors reported that divestment of recently acquired targets is generally considered by the business community and the stock markets as a strategic failure (Alexander et al, 1984; Montgomery et al, 1984).

Another indicator that may also signal the success or failure of an acquisition is its post-merger goodwill write-off. Indeed, goodwill amounts reflect the difference between the fair value (i.e. originally the price paid for them) of the assets acquired and their net book value. Under the accounting standard (SFAS 142), the amortization of Goodwill was replaced by the annual impairment method, forcing managers to review their estimates of the Goodwill and to disclose all the information related to this evaluation. When an acquisition is no longer worth what the acquirer has paid for it, managers should proceed to the reduction of the previous estimate of its Goodwill. Thus, the annual goodwill impairment test highlights whether an acquisition is still supporting its purchase value, otherwise, auditors will put pressure on the acquirer to write down the value of these intangible asset. Significant change in the value of the goodwill related to an acquisition will signal overpayment and winner's curse problems (Ruback, 1983; Giliberto and Varaiya, 1989) and could be used to assess the success or the failure of an acquisition (Henning and Shaw, 2003). However, when the acquirer does not divest the target and does not undertake significant goodwill write-offs in the years following the acquisition, it should indicate that the acquisition is performing more or less as anticipated.

Indeed, several past and recent studies used profitability measures, such as ROA, to estimate the post-merger abnormal performance related to an acquisition (Hoskisson and Hitt, 1990; Cosh et al, 2006) or to classify an acquisition as a successful or an unsuccessful one (Hitt et al, 1998). ROA is widely used in strategic management research (Bettis, 1981, Hoskisson and Hitt, 1990; Chatterjee and Wernerfelt, 1991; Allaire and Firsirotu, 1993; 2004) and it is highly correlated with other return measures (Bettis, 1981; Barton and Gordon, 1988). Furthermore, Return measures such as ROA are more suited to capture the effect of private synergistic cash flows associated with acquisitions (Barney, 1988; Harrison et al, 1991), which, according to Barney (1988), may exist "*when a target is worth more for a bidder than*

it is to any other bidders" (p.74) and when "...other bidding firms will be unable to duplicate the uniquely valuable combined cash flow of one bidder and targets when the relatedness between bidder and targets stems from some non-imitable assets or skills controlled by this bidding firm (p.76).

To estimate the ROA-adjusted measure of an acquisition success, we will proceed as follow:

- First, a *pro-forma* pre-acquisition performance ($ROA_{pre\ i,t}$) of each transaction in the sample will be determined for the target and the acquirer for the three years prior to the acquisition:

$$ROA_{pre\ i,t} = [Acquirer's\ NOPAT / Acquirer's\ Employed\ Assets] * [Acquirer's\ Economic\ Assets / (Acquirer's\ economic\ assets + Target's\ economic\ assets)] + [Target's\ NOPAT / Target's\ economic\ assets] * [Target's\ economic\ assets / (Target's\ economic\ assets + Acquirer's\ economic\ assets)]$$

Or

$$A- ROA_{pre\ i,t} = \frac{Acquirer's\ NOPAT + Target's\ NOPAT}{Acquirer's\ economic\ assets + Target's\ economic\ assets} - Sample\ average\ ROA_{pre\ i,t}$$

Where:

$$NOPAT = EBIT * (1 - Tax\ rate)$$

$$Economic\ Assets = Current\ assets - Current\ liabilities + Book\ value\ of\ long-term\ assets.$$

t = the financial year (t = -3, ..., -1). The year of the merger (t=0) is excluded to avoid bias due to additional expenses caused by the acquisition and the consolidation timing differences due to the acquisition (Healy et al, 1992).

- Second, the acquirer's post-acquisition performance measure ($ROA_{post\ i,t}$) was computed as:

$$Adjusted\ ROA_{post\ i,t} = \frac{Acquirer's\ NOPAT}{Acquirer's\ economic\ assets} - Sample\ Average\ ROA_{post\ i,t}$$

Where:

$$NOPAT = EBIT * (1 - Tax\ rate)$$

$$Economic\ Assets = Current\ assets - Current\ liabilities + Book\ value\ of\ long-term\ assets.$$

t = the financial year (t = 1, ..., 3). The year of the merger (t=0) is excluded to avoid bias due to additional expenses caused by the acquisition and the consolidation timing differences due to the acquisition (Healy et al, 1992).

Finally, to qualify as a successful acquisition in terms of ROA, the 3 years average of the post-acquisition performance should be higher than the 3 years average of the pre-acquisition performance as follow:

$$\text{Successful acquisition} = \frac{\sum_{t=1}^3 A\text{-ROA}_{\text{post } i,t}}{3} > \frac{\sum_{t=-3}^{-1} A\text{-ROA}_{\text{pre } i,t}}{3}$$

Following the above discussion on divestiture, goodwill write-offs and acquisition performance based on the ROA measure, we will ultimately classify an acquisition as a success if three conditions are fulfilled as follow:

- 1- Absence of any divestiture related to the acquisition under study during the 2 to 5 years after its completion;
- 2- No goodwill write-off related to the acquisition under study that exceeds 10% of the original value during the 2 to 5 years after the acquisition date;
- 3- All the acquisitions satisfying the criteria 1 and 2, should respect the following additional condition:

- ✓ The 3 years Average post-acquisition Adjusted-ROA > 3 years Average pre-acquisition Adjusted-ROA.

The dependent variable in the equation (1) related to the first conceptual model (plain arrows) in figure 5 presented at the beginning of the present chapter, and reflecting the probability of an acquisition success *AcqSuccess* is therefore a dichotomous variable that takes 1 if the three conditions are observed, and 0 otherwise.

For the equation (2) in relation to the second conceptual model presented in figure 5 (dashed arrows), the dependent variables is the continuous and quantified values for the successful acquisitions identified in the previous step, and which reflects the improvements in average Adjusted-ROA after the acquisition

4.3.3 Control variables

In order to control for some effects not considered as corporate governance components, and reported in the literature as significant factors that may contribute in acquisition success or failure, we will consider five control variables: (1) *Premium Index*; (2) *Acquirer and Target degree of relatedness*; (3) *Tobin's q gap between the acquirer and the target*; (4) *Acquirer's relative size* and (5) *The payment mode*.

- *Premium paid (PremiumPaid)*

As discussed in chapter 3, higher premiums may signal agency problems, winner's curse and managerial hubris and could lead to acquisition failure (Hayward and Hambrick, 1997; Giliberto and Varaiya, 1989; Sirower, 1997; Guaughan, 2005). As generally reported in the literature (Haunschild, 1994; Varaiya, 1987; Datta et al, 2001), this indicator will be computed as the price actually paid by the acquirer minus the target's pre-announcement market value (30 days before the announcement date) divided by the target's pre-announcement market value (30 days before the announcement date).

- *Acquirer-Target degree of Relatedness (A-T Relatedness)*

Although mixed, evidence on the significant impact of relatedness on the post-merger performance has received some degree of support from previous research (Healy et al; 1992; Datta and Puia, 1995; Weech-Maldonado, 2002; Lubatkin and O'Neill, 1987; Loree et al, 2000; Flanagan, 1996; Scanlon et al, 1989; Chatterjee and Lubatkin, 1990).

To measure this indicator, we will use the same procedures as in Morck et al (1990) and Haleblan and Finkelstein (1999), which consist in developing a continuous measure that take in account the degree of relatedness between the acquirer and the target and which will be computed as follow:

First, for acquirers and targets having multiple 4-digits SIC codes, we have classified the main SIC codes in which they operate according to sales importance in every business segment. Second, we compared the six principal 4 digit SIC codes of the acquirer and the target, and assigned 0 if no 4 digit SIC primary codes matched between the acquirer and the target during the year of acquisition and 1 if at least one primary 4 digit SIC codes matches. Third, for those that share at least one primary 4 digit SIC code, a weight was assigned for other matches than the primary one, as follow: 1 if 2 digit SIC are shared, 2 if 3-digit SIC are shared, 3 if 4-digit SIC are shared. Finally, the primary matches were weighted as follow: 2 when 2-digits primary SIC codes are shared, 4, when 3-digits are shared and 6 when the 4-digits are shared.

- *Tobin's q gap between the acquirer and the target. (Tobins'qGap)*

Several researchers have found that acquisitions are likely to succeed when the acquirer's Tobin' q is higher than the target's (Lang et al, 1989; Servaes, 1991). To measure this indicator we will use the following:

$$\text{Tobin's } q \text{ Gap} = \text{Acquirer Tobin's } q / \text{Target Tobin's } q$$

Where:

Tobin's q = [Market Value of equity + market value of long term debt] / [Book value of equity + book value of long term debt]¹ (Allaire and Firsirotu, 2003).

Other control variables identified in the literature as having an impact on acquisition performance include: (1) *Acquirer's relative size* (Asquith et al, 1983; Seth, 1990) measured as the target's assets divided by the acquirer's assets at the acquisition date and to be designated as (*AcquSize*), and (2) *PaymentMode* (Haleblian and Finkelstein, 1999; Ben-Amar and André, 2006) which is computed as the fraction of the price paid by the acquirer in form of common stocks.

1. As a simplification (or when no market value of debt is available), the book value of long-term debt is used in both numerator and denominator.

A summary of all our dependent, independent and control variables could be found in Table A.1, Appendix A.

4.4 Empirical models and Statistical Methods

In this section, we will present a set of two empirical equations along with a discussion of the statistical methods used to test them. The first equation refers to the measurements of the conceptual model presented in figure 5 (plain arrows). In order to test the hypotheses H1, H2, H1b, H3, H5, H7, H9, H11, H12, H14, H15, H16, H17, H20 and H21 our initial equation was:

$$(1) \text{ Prob (AcqSuccess}_{i,t}) = \beta_0 + \beta_1 \text{Qualsnpi} + \beta_2 \text{NEDown}_{it} + \beta_3 \text{SignShareholder}_{it} + \beta_4 \text{SignShareholderRep}_{it} + \beta_5 \text{Bcomp}_{it} + \beta_6 \text{NEDownvalue}_{it} + \beta_7 \text{Boarddiv}_{it} + \beta_8 \text{BoardCollExp}_{it} + \beta_9 \text{Boardspec}_{it} + \beta_{10} \text{BoardBus}_{it} + \beta_{11} \text{OverBoarded}_{it} + \beta_{12} \text{Auditcom}_{it} + \beta_{13} \text{Compcom}_{it} + \beta_{14} \text{FamilyControl}_{it} + \beta_{15} \text{DualShares}_{it} + \beta_{16} \text{FamilyBoard}_{it} + \beta_{17} \text{CEO-Board functional distance}_{it} + \beta_{18} \text{CEO-Board educational similarity}_{it} + \beta_{19} \text{CEO-Board age distance}_{it} + \beta_{20} \text{LoneFound}_{it} + \beta_{21} \text{LoneFoundChair}_{it} + \beta_{22} \text{Boardten}_{it} + \beta_{23} \text{Premium}_{it} + \beta_{24} \text{A-TRelatedness}_{it} + \beta_{25} \text{Tobin'sqGap}_{it} + \beta_{26} \text{AcqSize}_{it} + \beta_{27} \text{PaymentMode}_{it} + u_i$$

Our research seeks to investigate which governance attributes of our theoretical model, may discriminate better between successful and unsuccessful acquisitions and how these governance attributes contribute in creating value in the case of successful acquisitions. The first empirical model is based on a limited dependent variable *AcqSuccess*, which takes the value of one if the three criteria discussed in section 4.2.2 are fulfilled or zero otherwise. To assess how our predictor variables discriminate successful acquirers from unsuccessful ones, we opted for the binary logistic regression method which is widely used in strategic management research (Bowen and Wiersema, 2004) and it is always the first choice when a probability is to be estimated (Kleinbaum and Klein, 2002), as in the case of acquisition success or failure.

Accordingly, we consider that the binary logistic regression is an appropriate statistical approach for assessing which corporate governance variables may

enhance the likelihood of making successful acquisitions rather than unsuccessful ones, and also for describing how successful acquirers differ from unsuccessful ones on key corporate governance attributes, such as board legitimacy, board credibility and board monitoring and strategic capabilities.

Logistic regression consists in transforming the probability of a given event (dependent variable) in order to predict its occurrence by relevant predictor variables. Thus, if the probability to make a successful acquisition p is constrained between 0 (unsuccessful) and 1 (successful), the corresponding *Odds* is $p / (1-p)$, or the probability of belonging to the successful group divided by the probability of belonging to the unsuccessful one. While the probability is constrained between 0 and 1, *Odds* could range from 0 to extremely high values. Logistic regression models consist then to predict the probability of the occurrence of an event and are expressed as the natural logarithm of the corresponding *Odds*:

$$\ln [p / (1-p)] = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_n X_n$$

With

$$p = \exp (\beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_n X_n) / [1 + \exp (\beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_n X_n)]$$

Where:

p = probability of an event (in our case to make a successful acquisition)

$p/(p-1)$ = Odds ratio

X_1, X_2, \dots, X_n = predictors variables.

Hence, our regression equation (1) actually refers to the probability for a case of belonging to the successful Acquirers' group and could be expressed as:

$$\begin{aligned} (1) \ln [p(\text{AcqSuccess}_{i,t}) / (1 - p(\text{AcqSuccess}_{i,t}))] = & \beta_0 + \beta_1 \text{Qualsnp}_i + \beta_2 \text{NEDown}_i + \beta_3 \\ & \text{SignShareholden}_i + \beta_4 \text{SignShareholderRep}_i + \beta_5 \text{Bcomp}_i + \beta_6 \text{NEDownvalue}_i + \beta_7 \\ & \text{Boarddiv}_i + \beta_8 \text{BoardCollExp}_i + \beta_9 \text{Boardspec}_i + \beta_{10} \text{BoardBus}_i + \beta_{11} \text{OverBoarded}_i + \beta_{12} \\ & \text{Auditcom}_i + \beta_{13} \text{Compcom}_i + \beta_{14} \text{FamilyControl}_i + \beta_{15} \text{DualShares}_i + \beta_{16} \text{FamilyBoard}_i + \beta_{17} \end{aligned}$$

$$\begin{aligned} & \text{CEO-Board functional distance} + \beta_{18} \text{ CEO-Board educational similarity} + \beta_{19} \text{ CEO-Board} \\ & \text{age distance} + \beta_{20} \text{ LoneFound} + \beta_{21} \text{ LoneFoundChair} + \beta_{22} \text{ Boardten}_i + \beta_{23} \text{ Premium}_i + \\ & \beta_{24} \text{ A-TRelatedness}_i + \beta_{25} \text{ Tobin'sqGap}_i + \beta_{26} \text{ AcqSize}_i + \beta_{27} \text{ PaymentMode} + U_i. \end{aligned}$$

This conceptual model will not be necessarily tested as presented above and we may adjust it in order to discard variables with incomplete data, variables heavily loading in a common factor or variables that have no real impact on acquisition success. The retained model will be presented in the next chapter along with data analysis and logistic regression analysis and results.

In order to assess the ability of the entire set of independent variables in predicting the probability of cases in our sample in belonging to the successful or the unsuccessful acquirers' groups, we will enter in the first step, all the variables simultaneously. However, to identify which set of variables will efficiently discriminate between successful and unsuccessful acquirers, we will remove in a manual stepwise procedure those variables that have a significant *p-values* higher than 0,50 as recommended in (Hosmer and Lameshaw, 2000) to keep only the predictors' variables with the highest power of discrimination and those who enhance the model fit (While Hosmer and Lameshaw recommend to remove variables with *p-values* higher than 0.25, we prefer 0,50 in order to not remove variables that could potentially improve the model) .

In standard multiple regression, assumptions such as the linearity between the dependent and the independent variables, constant variance of the error terms, independence of the error terms and the normality of the error terms distribution should be observed (Hair et al, 1997). Conversely, logistic regressions remain robust even if many assumptions of the regression analysis are violated. Indeed, in logistic regressions the relationship between the dependent and the independent variables is nonlinear, the error term follows a binomial rather than a normal distribution while the variance of the dichotomous variable is not constant (Hair et al, 1997, p.277). Finally, the collinearity and multicollinearity among predictor variables, remains problematic in that they may reduce discriminatory power of the involved

independent variables. As for the case of logistic regressions, and according to Hair et al (1997, p.321) *"collinearity among the variables can make the discriminatory power redundant among variables, but redundancy does not make variables irrelevant from a perspective of explanation"*.

Nevertheless, and given the presence of several dummy variables used for the purpose of the present study, multicollinearity remains an important issue to consider in the case of logistic regression models. According to Kutner et al (2005) multicollinearity diagnostics could be classified as formal and informal. Informal multicollinearity diagnostics include the assessment of the following situations: (1) large changes in the estimated regression coefficients when a predictor variable is added or deleted; (2) predictor variables coefficients that are non-significant in individual test of important independent variables; (3) regression coefficients with unexpected algebraic sign; (4) large coefficients of the pair-wise correlation matrix of the predictor variables and (5) wide confidence intervals for the regression coefficients of important independent variables (Kutner et al, 2005; p. 407). Elsewhere, the authors point out that: *"The informal methods...have important limitation. They do not provide quantitative measurement of the impact of multicollinearity and they may not identify the nature of the multicollinearity. For instance, if predictor variables X_1 , X_2 and X_3 have low pairwise correlations, then the examination of simple correlation coefficients may not disclose the existence of relations among groups of predictor variables, such as a high correlation between X_1 and a linear combination of X_2 and X_3 (Kutner et al, 2005, p. 407)*. As for formal diagnostic, the use of the Variance inflation factor (VIF) is the widely accepted method for detecting the presence of multicollinearity problems.

The VIF measures how the variances of the estimated regression coefficients are inflated in comparison of the coefficients obtained when no linear relation exist between the explanatory variables. This formal method is also recommended by Hair et al (1997). To assess the multicollinearity among our predictor variables, we will analyse the matrix of pair-wise correlations between all our independent variables to identify higher correlations and check the Variance Inflation Factor (VIF) and specify

the cut-off or the tolerance value of this coefficient at the (0.10) level, that is, when the VIF value is above 10 (Hair et al, 1997; Kutner et al, 2005).

In order to deal with potential multicollinearity problems, an array of methods is available (see Kutner et al, 2005 for a detailed discussion on the subject), we believe that the most appropriate method would be the use of the principal component or factor analysis approaches consisting in identifying underlying latent factors between suspected independent variables and use, when required, the variable factor scores of these factors in our logistic regression model instead of the original data.

The second equation refers to the second model depicted in the figure 5 (dashed arrows) and aims to assess, for the successful acquirers, the impact of our variables on the post-merger performance measured by the continuous positive values computed as the difference between the $ROA_{post\ i,t}$ and the $ROA_{pre\ i,t}$ as described in section 4.2.2 above. Thus, the dependent variable in this equation becomes the post-acquisition performance, ΔROA_i computed as follow:

$$\Delta ROA_i = [ROA_{post\ i,(t+1\ to\ t+3)} - ROA_{pre\ i,(t-3\ to\ t-1)}] / ROA_{pre\ i,(t-3\ to\ t-1)}$$

For the purpose of testing the model in figure 5 (relations represented with dashing arrows), and therefore the hypotheses H4, H6, H8, H10, H13, H18 and H19, we consider the following potential equation:

$$(2) \Delta ROA_i = \beta_0 + \beta_1 Qualsnpi + \beta_2 NEDowni + \beta_3 SignShareholden + \beta_4 SignShareholderRep + \beta_5 Bcomp + \beta_6 NEDownvaluei + \beta_7 Boarddivi + \beta_8 BoardCollExp + \beta_9 Boardspeci + \beta_{10} BoardBus + \beta_{11} OverBoarded + \beta_{12} Auditcomi + \beta_{13} Compcomi + \beta_{14} FamilyControl + \beta_{15} DualShares + \beta_{16} FamilyBoard + \beta_{17} CEO-Board\ disti + \beta_{18} LoneFound + \beta_{19} LoneFoundChair + \beta_{20} Pdivesti + \beta_{21} Boardteni + \beta_{22} ManagExp_i + \beta_{23} PrevExp_i + \beta_{24} Premium_i + \beta_{25} A-TRelatedness_i + \beta_{26} Tobin'sqGap_i + \beta_{27} AcqSize_i + \beta_{28} PaymentMode + U_i$$

The same procedure applied for the multicollinearity issues will be considered for the second equation. However, OLS regression should conform to the conditions of the linearity between the dependent and the independent variables, the constant variance of the error terms, the independence of the error terms and the normality of the error term distribution (Hair et al, 1997). Thus, equation (2) as presented above could be modified in order to keep only variables that observe these conditions and those which will appear to be significant discriminators in equation (1). Given the endogeneity problems that hinder most of the corporate governance models, we will proceed with the necessary tests and remedials if such problems are encountered. Endogeneity and its treatment will be discussed in the next chapter along with the analysis of the OLS models.

CHAPTER V

ANALYSIS AND RESULTS

In this chapter, we will present our sample characteristics and the corresponding descriptive statistics, statistical models analysis along with their corresponding results and interpretations.

5.1 Sample characteristics and descriptive statistics

As described in chapter 4, we ended with a sample of 134 acquisitions that fulfilled all the criteria discussed above. However, at the end of the data collection step on the adopted variables, only 133 acquisitions had complete observations on all the variables of interest, which constituted our final sample for testing our empirical models.

5.1.1 Sample characteristics

Acquirers in our sample are all Canadian public companies belonging to different industries and sectors. We note in Table 5.1 that the majority of the acquirers in the sample are mining or oil and gas extraction companies (42,11%) followed by manufacturing firms (18,80%), Support activities for the mining and oil industries and Information and cultural industries (including telecommunications firms such as BCE, Rogers communications and Telus) with (9,77%) each. Other represented sectors are Professional services, Finance and Insurance, Construction,

Transportation, utilities, Forestry and logging, Management of companies, Arts and entertainment, Accommodation, Food services and Retail representing 15% of the sample.

Firms in our sample with a significant shareholder controlling at least 10% of the company's voting shares represented about 56% against 44% without any significant shareholder (Table 5.2), while these significant shareholders were represented in 84% of the cases (Table 5.3).

Table 5.1
Distribution by Industrial sectors in the sample

Industrial sectors	Frequencies	%	Cumulative %
Metal and Ore mining	29	21.80	21.80
Oil and gas extraction	27	20.30	42.11
Manufacturing	25	18.80	60.90
Support activities for mining, oil and gas extraction	13	9.77	70.68
Information and cultural industries	13	9.77	80.45
Professional, scientific and technical services	06	4.51	84.96
Finance and insurance	05	3.76	88.72
Construction	03	2.26	90.98
Transportation	03	2.26	93.23
Utilities	02	1.50	94.74
Forestry and Logging	02	1.50	96.24
Management of companies and enterprises	02	1.50	97.74
Arts, entertainment and recreation	01	0.75	98.50
Accommodation and food services	01	0.75	99.25
Retail trade	01	0.75	100.00
Total	133	100.00	

Table 5.2
Existence of a Significant Shareholder controlling 10% or more of the voting share (other than an institutional Fund)

Acquirers in the Sample	Frequencies	%	Cumulative %
With a Significant Shareholder	75	56.39	56.39
Without	58	43.61	100.00
Total	133	100.00	

Table 5.3
Significant Shareholder represented on the Board of Directors

Acquirers in the Sample	Frequencies	%	Cumulative %
Having	63	84.00	84.00
Not Having	12	16.00	100.00
Total	75	100.00	

Firms with a Nominating or Corporate Governance committee charged with directors' nomination, represented 56,39% of our sample (Table 5.4). As we have included in our sample acquisitions between 2000 and 2002, that is, before the Sarbanes-Oxley effect, we computed the proportions for both the 2000-2002 and 2003-2006 periods to see if there is any evolution following the changes in corporate governance rules.

Firms with a nominating committee represented almost 62% (42 out of 68) in the period 2000-2003, while this proportion was around 51% (33 out of 65) for the period 2003-2006. These proportions show that, at least in the case of the firms composing our sample, the effect of the governance reform was not really noticeable after 2002.

Table 5.4
Acquirers with a Nominating or a Corporate Governance committee

Acquirers in the Sample (2000-2006)	Frequencies	%	Cumulative %
With	75	56.39	56.39
Without	58	43.61	100.00
Total	133	100.00	
Acquirers in the sample (2000-2002)	Frequencies	%	Cumulative %
With	42	61.76	61.76
Without	26	38.24	100.00
Total	68	100.00	
Acquires in the sample (2003-2006)	Frequencies	%	Cumulative %
With	33	50.77	50.77
Without	32	49.23	100.00
Total	65	100.00	

Occupational background of Directors in our sample was distributed among 12 categories, with about 37,5% being CEOs in exercise, while about 27% were occupying another executive function such as Vice-presidents or Chief officers (COOs, CFOs, CSOs...etc.). About 8% of directors in the sample were Lawyers and about 8% were retired CEOs. It is interesting to note that Academics were represented by only 1,75% in our sample (Table 5.5).

Table 5.5
Distribution of Directors' Occupational Functions during the acquisition year

Occupations	Frequencies	%	Cumulative %
CEOs in exercise (other than the acquirer's CEO)	273	25.18	25.18
Sample Acquirer's CEO	133	12.27	37.45
Other Executive functions	291	26.85	64.30
Lawyers	88	8.12	72.42
Retired CEOs	84	7.75	80.17
Other retired Executives	47	4.34	84.51
Consultants	54	4.98	89.49
Bankers	34	3.14	92.63
Former politicians	28	2.58	95.21
Academic	19	1.75	96.96
Professional Chartered Accountants	15	1.38	98.34
Former civil servants	09	0.83	99.17
Other	09	0.83	100.00
Total	1084	100.00	

As for dominant functional backgrounds of Directors, based on their whole career (Table 5.6), Support functions categories comprising Finance, Accounting, Law, Human resources and other Administrative functions accounted for about 68.5% of directors in our sample. Throughput functions that comprise operations, R&D and Engineering was represented by 29%, while Marketing and Sales represented only 2,6% of directors in our sample

Table 5.6
Distribution of Directors' Functional Background

Functions	Frequencies	%	Cumulative %
Output functions: marketing and sales	28	2.58	2.58
Throughput functions: operations, R&D and engineering	314	28.97	31.55
Support functions: Finance, accounting, law, human resources and other administrative functions	742	68.45	100.00
Total	1084	100.00	

Educational Level of directors was assessed along five categories: Less than a Bachelor degree; Bachelor degree; Less than a Master degree; Master degree but less than doctoral degree and Doctoral degree (Table 5.7). About 53% of directors in our sample hold a Bachelor degree, followed by directors holding a Master degree in 27.5% of the cases. Directors with less than a Bachelor degree represent about 8% of our directors' sample, while Directors with less than a Master degree and those with a doctoral degree accounted for about 12% (6% for each category).

Table 5.7
Distribution of Directors' Educational Level

Functions	Frequencies	%	Cumulative %
Less than a Bachelor degree	84	7.74	7.74
Bachelor degree	571	52.68	60.42
Less than a Master degree	66	6.09	66.51
Master degree but less than a doctoral degree	298	27.49	94.00
Doctoral degree	65	6.00	100.00
Total	1084	100.00	

5.1.2 Descriptive statistics

Descriptive statistics of continuous predictor variables are presented in Table 5.8, while frequencies of the remaining binary predictor could be found in Table 5.9. Variables' definition and summary description could be found in Table A.1 of Appendix A.

Acquirers with a majority of Directors sitting on at least three other Boards represented about 41% (Table 5.9), while those having a Lone Founder accounted for 57% of the sample and those with the Lone Founder as a Chairman around 44% of the sample. Finally, 19,5% of the Acquirers in our Sample used Dual Shares as a control mechanism (Table 5.9).

Following the classification procedure explained in section 4.2.2, we ended with 51 successful Acquisitions and 81 unsuccessful ones. Frequencies for our dependent variable *AcquSuccess* are shown in (Table 5.10). However, among the 81 unsuccessful cases, 40 acquirers satisfied only conditions 1 and 2, that is: they did not divest the acquisition under study and they did not write down more than 10% of the goodwill related to this acquisition in the two to five years after the acquisition date. Thus, 40 acquirers were classified as unsuccessful because the difference between their ROApost-acquisition and ROApre-acquisition was negative.

Table 5.8
Descriptive Statistics of continuous predictor variables

Variables	Mean	SD	Median	Min	Max
BoardComp	0,7173	0,1417	0,7500	0,3000	0,9300
NedOwn	0,0505	0,1133	0,0052	0,0000	0,7812
NedOwnValue	0,8097	0,2512	0,9477	0,0121	1,0000
Qualsnp	2,3700	2,4350	2,0000	0,0000	8,0000
Boarddiv	1,6423	0,4054	0,7070	0,0000	2,0500
BoardSpec	1,0582	1,0369	0,8154	0,0000	9,5000
AuditCom	0,6454	0,2453	0,6667	0,0000	1,0000
OverBoarded	0,1947	0,1939	0,1818	0,0000	0,8000
CompCom	3,7400	2,1270	4,0000	0,0000	7,0000
Boardten	0,6654	1,0518	0,6262	0,0000	12,1037
PremiumPaid	0,2535	0,2748	0,2317	-0,5455	1,2452
A-T Relatedness	5,0080	3,6003	5,0000	0,0000	16,0000
Tobin's Q-Gap	1,5269	0,9544	1,2597	0,0862	5,9991
Acqusize	0,5000	0,5447	0,3030	0,0011	2,5463
PaymentMode	0,5825	0,4025	0,6329	0,0000	1,0000
CEO-Board FuncDistance	0,6287	0,3074	0,7500	0,0000	1,0000
CEO-Board EducSim	0,2727	0,2619	0,2130	0,0000	1,0000
CEO-Board Age distance	11,1421	4,7999	10,5400	1,2900	24,9000
N Valid cases	133				

Table 5.9
Frequencies of predictor binary variables

Variables	Frequencies	%	Cumulative %
SignShareholder			
1	75	56,39	56,39
0	58	43,61	100,00
Total	133	100,00	
SignShareholderRep			
1	63	47,37	47,37
0	70	52,63	100,00
Total	133	100,00	
BoardBus			
1	54	40,60	40,60
0	79	59,40	100,00
Total	133	100,00	
FamilyControl			
1	57	42,90	42,90
0	76	57,10	100,00
Total	133	100,00	
FamilyBoard			
1	55	41,40	41,40
0	78	58,60	100,00
Total	133	100,00	
DualShare			
1	26	19,50	19,50
0	107	80,50	100,00
Total	133	100,00	
LoneFounder			
1	76	57,10	57,10
0	57	42,90	100,00
Total	133	100,00	
LoneFounderChair			
1	59	44,44	42,90
0	74	55,56	100,00
Total	133	100,00	

Table 5.10
Frequencies of the dependent variable *AcquSuccess*

	Frequencies	%	Cumulative %
1	51	38,35	38,35
0	82	61,65	100.00
Total	133	100.00	
Acquirers that satisfied All the conditions	51		
Acquirers with a negative ROApostA-ROApreA	40		
Acquirers that satisfied only conditions 1 and 2	91		

5.1.3 Correlations among variables and Factor analysis

5.1.3.1 Correlations among variables

We address in this section the correlations among variables in our Sample. The examination of Table B.1 (see Appendix B) reveals that:

- *AcquSize* variable is negatively and significantly correlated to *NedOwn%*, *SignShareholder* and *SignShareholderRep* while it is positively and significantly correlated with *Qualsnp*, *BoardDiv* and *A-T Relatedness*;
- *BoardComp* variable is positively and significantly correlated with *Qualsnp*, while it is negatively and significantly correlated with *LoneFounderChair*;
- *NedOwn* variable is positively and significantly correlated to *NedOwn%*, *SignShareholder*, *SignShareholderRep*, *LoneFounder*, while it is negatively correlated to *Boardten* and *PremiumPaid*;
- *NedOwn%* variable is also positively and significantly correlated with *FamilyControl* and *FamilyBoard*, but negatively and significantly correlated to *Qualsnp* and *LoneFounderChair*;
- *Qualsnp* variable is also positively and significantly correlated to *BoardDiv*, *OverBoarded*, *A-T Relatedness* and *EducSim*, but negatively and significantly correlated with *FamilyControl*, *DualShare* and *LoneFounder*;

- *SignShareholder* variable is also positively and significantly correlated with *SignShareholderRep* and as expected, the correlation is a strong one (0,834), which indicate a colinearity issue. We will address this problem in the next section by using Factor Analysis in order to detect underlying factors among our variables set. Furthermore, *SignShareholder* is also positively and significantly correlated with *FamilyBoard* and negatively correlated with *PremuimPaid*;
- *SignShareholderRep* variable is also positively and significantly highly correlated to *Familycontrol* (0,761) and *FamilyBoard* (0.763) but moderately with *Boardten*. Once again, we suspect that there is a multicollinearity issue involving the *Shareholder*, *ShareholderRep*, *FamilyBoard* and *FamilyControl* variables. We will address this problem in the next section
- *BoardDiv* variable is also positively and significantly correlated with *FamilyControl*, while it is negatively and significantly correlated to *LoneFounderChair* and *PaymentMode*;
- *BordCollExp* variable is positively and significantly correlated with *EducSim*, but negatively and significantly correlated to *BoardBus*, *AuditCom* and *Age Distance*;
- *BoardSpecExp* variable is positively and significantly correlated to *OverBoarded* and *CompCom*, but negatively and significantly to *EducSim*;
- *BoardBus* variable is positively and significantly correlated to *OverBoarded*, *AuditCom*, *Tobin'Sq-Gap*, *FuncDist* and *Age Distance* variables. The Correlation degree (0.52) between *BoardBus* and *OverBoarded* could reveal a common underlying factor, we will check this eventuality in the next section;

- *OverBoarded* variable is also positively and significantly correlated with *LoneFounder* and *PaymentMode*, while it is negatively correlated with *AcquSize* and *FuncDist*;
- *AuditCom* variable is positively and significantly correlated with *Tobin'sQ-Gap* and negatively with *FuncDist*;
- *CompCom* variable is also negatively and significantly correlated with *AcquSize*;
- *FamilyControl* variable is also positively and significantly correlated with *FamilyBoard*. These two variables are strongly correlated (0,97) and suggest a potentially serious problem of colinearity. This problem will be handled in the next section. In addition, *FamilyControl* is positively and significantly correlated with *Boardten*, while it is negatively and significantly correlated with *LoneFounder*, *LoneFounderChair*, *PremiumPaid* and *AcquSize* variables;
- *DualShare* variable is positively and significantly correlated with *Boardten*, *PremiumPaid*, *FuncDist*, while it is negatively and significantly correlated to *AcquSize*;
- *FamilyBoard* variable is also negatively and significantly correlated with *LoneFounder*, *LoneFounderChair*, *PremiumPaid* and *AcquSize*, while it is positively and significantly correlated with *Boardten*;
- *LoneFounder* variable is also positively and significantly correlated with *LoneFounderChair* and as expected this correlation was also strong (0,77), which suggest again some colinearity problems. We will once again address this issue in the next section. Furthermore, *LoneFounder* is also positively and significantly correlated with *PaymentMode*;

- *LoneFounderChair* is also correlated in a positive and a significant way with *FuncDist*;
- *A-T Relatedness* was found to be positively and significantly correlated with *Age Distance*.

As mentioned above, several colinearities and multicollinearities among variables were detected, which lead us to perform a factor analysis in order to find a solution, if any, that could help us eliminate the effect of colinearity on our final logistic model results.

5.1.3.2 Factor Analysis

As a multivariate method, Factor analysis is suitable for our purpose, that is, to identify latent dimensions represented in the original variables in order to identify representative variables that could help us eliminate the multicollinearity issue identified in the previous section, by investigating how the involved variables relate to each other, and how they load in a particular factor and if they could be replaced by their factor scores.

Although the different extraction methods tend to generate similar solutions, we chose to perform Principal Axis Factoring with Unweighted Least Square (ULS) factoring and varimax orthogonal rotation to keep the factors independent of each other during the rotation process. The choice of Principal Axis Factoring method was based on the exploratory nature of our investigation and the fact that we have at this stage a little knowledge about the amount of specific and error variance, which will be eliminated to account only on the common variance, that is, the variance in each variable that is shared with all the other variables in our analysis.

Results of Factor analysis are shown in Tables 5.11, 5.12 and 5.13. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy, which indicates the appropriateness of using Factor Analysis for a particular set of data should generally be comprised between 0,5 and 1 for the analysis to be considered appropriate. As

shown in Table 5.11, the KMO measure is 0.607, which indicates that the sample correlations are adequate for the purpose of Factor Analysis.

Table 5.11
Factor analysis- KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,607
Bartlett's Test of Sphericity	Approx. Chi-Square	1303,192
	Df	351
	Sig.	,000

As for the Bartlett's test of Sphericity, it provides an assessment of the null hypothesis consisting in that none of the variables are significantly correlated. The Bartlett's test resulted in Chi-Square of 1303,19 and is significant (0,000), which lead us to reject the null hypothesis and confirm that the matrix correlation has significant correlations among at least some of the variables. These results indicate that our data were suitable and that we can further proceed with the Factor Analysis and consider the extracted factors as potentially valid solutions.

The extracted factors from all the variables are shown in Table 5.12, while the retained factors are presented in table 5.13. The Analysis of the results leads as to consider 5 factors for analysis by using the Cattell's scree (Figure 5.1) test in order to consider only factors with eigenvalues superior to 1. From these five factors, 3 were meaningful and interpretable (Table 5.13). The first factor was Named *Acquirer's Ownership and control characteristics* where we find all the variables in relation with firm ownership and control loading on this factor. Indeed, *SignShareholder*, *SignShareholderRep*, *FamilyBoard*, *FamilyControl* and *Dualshares* are all variables related to firm Ownership structure. These variables were previously identified as potentially suspects for multicollinearity, and replacing them by this factor scores will mitigate the potential of multicollinearity as discussed previously. The second factor in our analysis was named *LoneFounder Leadership* given that clearly two variables related to the existence and the Chairman position of the Lone Founder were loading on it.

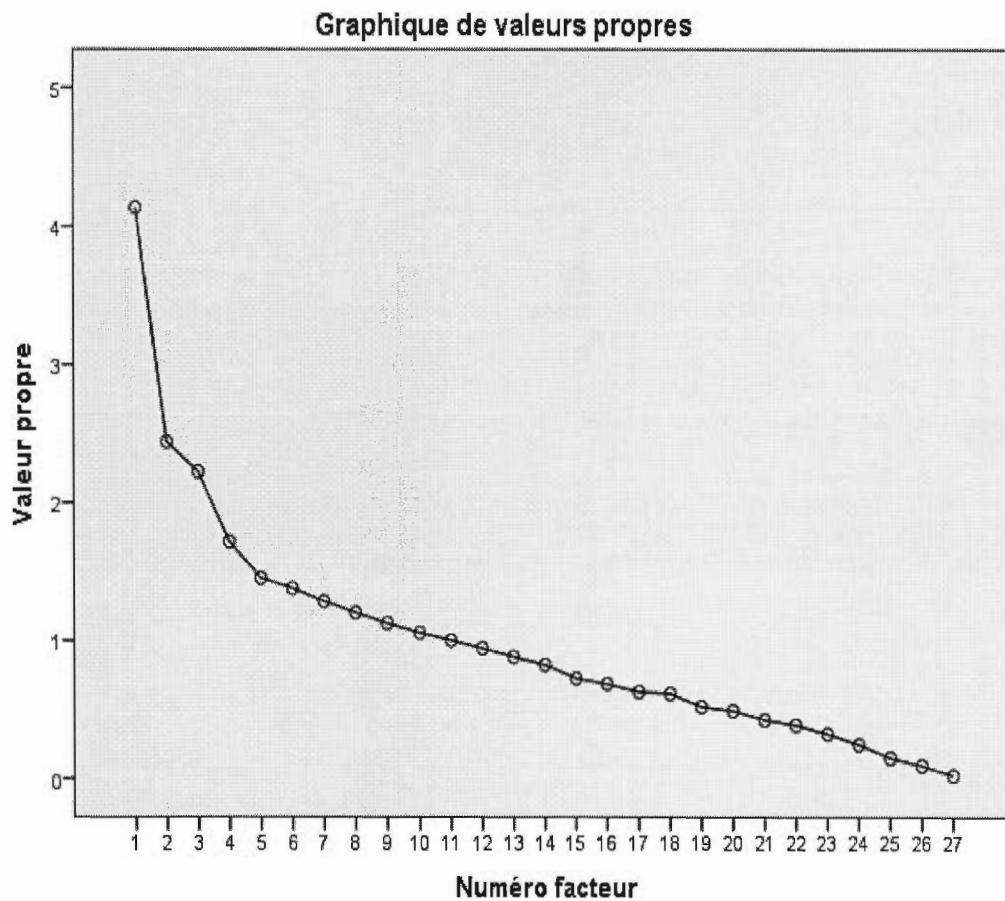


Figure 5.1: Cattell's Scree Plot

Thus, the Factor scores of the Lone Founder Leadership Factor will replace the original data on the two involved variables in our subsequent models. Finally, the third factor was named Director's Busyness and once again, the two variables loading on it describe clearly the degree of Director's busyness for a particular Board. Here again, we will use this Factor's scores to replace the two involved variables. We note that the three factors explain 29% of the total variance (see Table 5.12).

Table 5.12
Principal Axis Factor Analysis (ULS)- All the variables
Varimax Rotated Factor Matrix^a

	Factor				
	1	2	3	4	5
SignShareholderRep	,932	-,023	,008	-,059	,088
FamilyBoard	,870	-,016	,046	,077	-,160
SignShareholder	,860	,030	-,105	-,064	,060
FamilyControl	,859	-,015	,056	,058	-,153
DualShare	,509	-,005	,233	-,095	-,188
LoneFounder	-,012	,976	-,058	,120	-,132
LoneFounderChair	-,004	,821	,167	-,019	,002
BoardBus	,039	,055	,736	-,066	-,008
OverBoarded	-,066	,039	,679	-,013	,209
Auditcom	,129	,027	,280	,120	-,036
AcquSize	-,102	-,060	-,176	,841	-,053
Tobin'sQ-Gap	,048	,136	,113	,212	-,047
BoardDiv	,062	-,049	,166	-,102	,152
Qualsnp	-,129	-,089	,113	-,096	,847
Educational Similarity	,018	-,012	,092	-,061	,040
NedOwnValue	,114	,097	,137	-,108	-,083
BoardSpecExp	-,142	,118	,137	-,008	-,140
CompCom	-,143	-,184	,100	-,138	-,003
Age distance	-,082	-,048	-,084	-,091	-,067
A-T Relatedness	-,089	,052	,026	,010	,079
Boardten	,096	-,058	-,059	-,050	,086
Boardcomp	,027	-,094	,019	-,207	,275
NedOwn	,269	,045	-,016	-,003	-,119
PremiumPaid	-,017	,039	-,084	-,050	,041
PaymentMode	-,033	,213	,069	,193	,098
Functional distance	,014	,095	-,039	,068	-,077
Eigenvalue (before rotation)	3,938	2,121	1,783	1,299	0,943
Cumulative % of variance	14,584	22,439	29,044	33,856	37,346

^aRotation Method : Varimax with Kaiser Normalization; N= 133.

Table 5.13
Principal Axis Factor Analysis (ULS)- Retained meaningful factors
Varimax Rotated Factor Matrix^a

	Acquirer's Ownership and Control Characteristics (<i>OwnChar</i>)	Lone Founder Leadership (<i>LoneFounderLead</i>)	Director's Busyness (<i>DirectBus</i>)
SignShareholderRep	,932	-,023	,008
FamilyBoard	,870	-,016	,046
SignShareholder	,860	,030	-,105
FamilyControl	,859	-,015	,056
DualShare	,509	-,005	,233
LoneFounder	-,012	,976	-,058
LoneFounderChair	-,004	,821	,167
BoardBus	,039	,055	,736
OverBoarded	-,066	,039	,679

^aRotation Method : Varimax with Kaiser Normalization; N= 133.

5.2. Analysis of the Logistic Regression Models

5.2.1 Logistic Regression Models Testing and Refitting

In the present section we will first redefine our initial model discussed and presented in section 4.3 in order to replace the original variables that presented potential multicollinearity problems identified and treated in the previous sections.

Thus, the variables *SignShareholder*, *SignShareholderRep*, *FamilyBoard*, *FamilyControl* and *DualShare* will be replaced by the scores of the *Acquirer's Ownership and Control Characteristic Factor (OwnChar)* and will be representative of the *Board Monitoring capabilities* dimension. This redefinition means that Hypothesis H5 will be also tested through the *OwnChar* variable. As for the variables *Lone Founder* and *Lone FounderChair*, we will replace them by the scores of the *LoneFounder Leadership factor (LoneFoundLead)* and will remain representative of the *Board Strategic capabilities* dimension. Finally, the *BoardBus* and *OverBoarded* variables will be replaced by the scores of the *Directors' Busyness factor (DirectBus)*

and will remain as a measure of the Credibility dimension. Our empirical model (1) defined previously becomes as follow:

$$(1) \quad \text{Ln} [p(\text{AcqSuccess}_{i,t}) / (1 - p(\text{AcqSuccess}_{i,t}))] = \beta_0 + \beta_1 \text{Qualsnp}_i + \beta_2 \text{NEDown}_i + \beta_3 \text{OwnChar}_i + \beta_4 \text{Bcomp}_i + \beta_5 \text{NEDownvalue}_i + \beta_6 \text{Boarddiv}_i + \beta_7 \text{BoardCollExp}_i + \beta_8 \text{Boardspec}_i + \beta_9 \text{DirectBus}_i + \beta_{10} \text{Auditcom}_i + \beta_{11} \text{Compcom}_i + \beta_{12} \text{CEO-Board functional distance}_i + \beta_{13} \text{CEO-Board educational similarity}_i + \beta_{14} \text{CEO-Board age distance}_i + \beta_{15} \text{LoneFoundLead}_i + \beta_{16} \text{Boardten}_i + \beta_{17} \text{Premium}_i + \beta_{18} \text{A-TRelatedness}_i + \beta_{19} \text{Tobin'sqGap}_i + \beta_{20} \text{AcqSize}_i + \beta_{21} \text{PaymentMode}_i$$

As we included numerous variables in our empirical model, it is recommended to proceed with a strategy that will help us to select the variables that will result in the best model within the scientific context of the problem, in our case the prediction of successful acquisitions. Such a strategy aims to seek a parsimonious model that still explains the Data and help to generate a numerically stable solution that is less dependent of the data and with minimized standard errors (Hosmer and Lameshaw, 2000).

Following Hosmer and Lameshaw (2000), we will fit a univariable logistic regression model for each independent variables with our dependent variable and examine the estimated coefficients, the standard errors, the likelihood ratio test for significance and the Wald statistic. Although the authors suggest to include in the final model only variables that showed a *p-value* inferior to 0,25 with the univariable logistic regression, we will extend this criterion to include all the variables that showed at least 0,50 as *p-value*. By choosing to retain variables with *p-values* of at least 0,50 we will minimize the elimination of variables that when taken separately show a weak association with the acquisition success but when taken with the other variables will become important predictors.

When the candidate variables are all entered together, the same procedure of verifying those variables that are not contributing to the overall model will be performed and the model will be refitted by eliminating these variables until the best

one is reached. After proceeding with the univariable regression step the following model was retained for the first test:

$$(1a) \ln [p(\text{AcqSuccess}_{i,t})/(1 - p(\text{AcqSuccess}_{i,t}))] = \beta_0 + \beta_1 \text{Boardcomp} + \beta_2 \text{NEDown}_i + \beta_3 \text{Qualsnp}_i + \beta_4 \text{NEDownvalue}_i + \beta_5 \text{Boarddiv}_i + \beta_6 \text{BoardspecExp}_i + \beta_7 \text{DirectBus}_i + \beta_8 \text{AuditCom}_i + \beta_9 \text{Compcom}_i + \beta_{10} \text{OwnChar} + \beta_{11} \text{CEO-Board FuncDist}_i + \beta_{12} \text{CEO-Board EducSim}_i + \beta_{13} \text{CEO-Board age distance}_i + \beta_{14} \text{LoneFoundLead}_i + \beta_{15} \text{Boardten}_i + \beta_{16} \text{PremiuPaid}_i + \beta_{17} \text{A-TRelatedness}_i + \beta_{18} \text{Tobin's q Gap}_i + \beta_{19} \text{AcquSize}_i + \beta_{20} \text{PaymentMode}_i$$

The redefined model (1a) imply that the *Legitimacy* dimension is measured through *BoardComp*, *NedOwn*, *Qualsnp* and *NedOwnValue* variables, while the *Credibility* dimension is measured through *BoardDiv*, *BoarsSpecExp*, and *DirectBus* variables.

Board Monitoring capabilities dimension is measured by *AuditCom*, *CompCom* and *OwnChar*, while the *Board Strategic capabilities* dimension is measured by *CEO-Board FuncDist*, *CEO-Board EducSim*, *CEO-Board Age distance*, *LonefoundLead* and *Boardten* variables. Retained Control variables are *PremiumPaid*, *A-T Relatedness*, *Tobin's q Gap*, *AcquSize* and *PaymentMode*. Hypotheses remain identical to those proposed in Chapter 3.

Table 5.14
Logistic Model (1a) Classification Table

Observations		Predicted		
		AcquSuccess		Percentage correct
		0	1	
Step 1	AcquSuccess 0	67	15	81,7
	AcquSuccess 1	24	27	52,9
	Pourcentage global			70,7

Table 5.15
Logistic regression results- Model (1a)

<i>Dependent Variable: AcquSuccess</i>							
Initial Model (1a)	B	S.E	Wald	df	Sig	Exp (B)	Status
Intercept	-3,228	2,370	1,856	1	0,173	0,040	
BoardComp	-2,916	1,704	2,929	1	0,087	0,054	
NedOwn	-2,078	2,161	0,925	1	0,436	0,125	
Qualsnp	0,241	0,102	5,613	1	0,018	1,273	
NedOwnValue	-0,973	0,949	1,051	1	0,305	0,378	
Boarddiv	1,525	0,752	4,120	1	0,042	4,597	
BoardSpec Exp	0,609	0,285	4,557	1	0,033	1,839	
DirectBus	-0,388	0,293	1,758	1	0,185	0,678	
AuditCom	0,726	1,000	0,527	1	0,468	2,067	H12 Rejected
CompCom	0,078	0,111	0,503	1	0,478	1,082	H12 Rejected
OwnChar	0,114	0,240	0,228	1	0,633	1,121	H14; H5 Rejected
CEO-Board FuncDist	0,723	0,720	1,010	1	0,315	2,061	
CEO-Board EducSim	2,010	0,979	4,216	1	0,040	7,463	
CEO-Board Age dist	0,041	0,045	0,822	1	0,365	1,042	
LoneFounderLead	-0,224	0,230	0,947	1	0,331	0,799	
Boardten	-0,043	0,241	0,032	1	0,858	0,958	H21 Rejected
PremiumPaid	-0,620	0,808	0,590	1	0,442	0,538	
A-T Relatedness	0,091	0,065	1,957	1	0,162	1,095	
Tobin's Q-Gap	-0,138	0,261	0,277	1	0,599	0,871	
AcquSize	-0,145	,516	0,079	1	0,779	,865	
PaymentMode	-0,650	0,596	1,192	1	0,275	0,522	
N	133						
-2log Likelihood	141.84						
Chi-Square	35.245						
(p-value)	(.027)						
Hosmer-Lamshaw	4.599						
(p-value)	(.799)						
Nagelkerke R2	.316						

The results of model (1a) are shown in Tables 5.14 and 5.15. Classification of successful acquisitions based on a cut-off of 0.5 predicted only 52% of successful acquisition against almost 82% of unsuccessful ones, while the overall classification rate was around 71% (Table 5.14). The model is acceptable with a significant Chi-Square (35.245, $p=0.027$) and with a non significant test for Goodness of Fit measured by the Hosmer-Lamshaw test of (4.599, $p=.799$), leading to the non rejection of the null hypothesis consisting in that the predictions and the observed

values do not differ. Finally, the Nagelkerke R^2 indicates that the model accounted for approximately 32% of the total variance (Table 5.15).

Although these results are somewhat acceptable, we decided to follow the strategy of removing variables that have more than a *p-value* of 0,40 to see if the remaining variables will empower our final model. Furthermore, the examination of the standardized residuals and the Cook's distances (not reported) showed several cases with a value superior to 2 for the Standardized residuals and superior to 1 for the Cook's distances. Thus, and before starting the interpretation of our coefficients and odds ratios, we will proceed with the elimination of these outlier cases, if any, then check the effect on the model to finally discard all the variables with a *p-values* superior than 0,40.

The results after these changes are presented in Tables 5.16, 5.17 and 5.18. The final model contained only 125 cases as 8 outliers were removed after the examination of the Standardized errors and the Cook's distances. The improved model seems to be more fitted with noticeable improvements of all its parameters. The overall success rate raised from 70% in the previous model (1a) to almost 78% in the final model (1b), while the prediction of successful acquisition improved dramatically from 52,9% to 71% in the final model.

As for the other statistics (see Table 5.17), we notice a strongly significant Chi-Square (60.95, *p-value*= 0,000) indicating a robust overall degree of similarity between the observed probabilities and those predicted by model (1b).

Furthermore, the Hosmer-Lameshaw goodness of fit test is not significant (7,49, *p-value*=0,529) and the Nagelkerke- R^2 indicates now that model (1b) is accounting of almost 53% of the variance instead of 32% in the previous model (1a). The examination of the Standardized Residuals and the Cook's distances for model 1b reveal no effect of outliers and we notice that the standard errors reported in Table 5.17 are all inferior to 2, indicating that there is no sign of a significant multicollinearity effect or other numerical problems detected in the model. Finally the ratio of the independent variables to the number of observations is now 1:10, which

is the recommended ratio for the Logistic regression method as reported by many authors.

Table 5.16
Logistic Model (1b) Classification Table

Observations			Predicted		
			AcquSuccess		Percentage correct
			0	1	
Step 1	AcquSuccess	0	65	15	81,3
		1	13	32	71,1
	Pourcentage global				77,6

Following our efforts to improve the initial model (1), the final one to be interpreted for hypotheses testing is:

$$\begin{aligned}
 (1b) \quad \ln [p(\text{AcqSuccess}_{i,t})/(1 - p(\text{AcqSuccess}_{i,t}))] = & \beta_0 + \beta_1 \text{Boardcomp} + \\
 & \beta_2 \text{Qualsnp}_i + \beta_3 \text{NEDownvalue}_i + \beta_4 \text{Boarddiv}_i + \beta_5 \text{BoardspecExp}_i + \\
 & \beta_6 \text{DirectBus}_i + \beta_7 \text{CEO-Board FuncDist}_i + \beta_8 \text{CEO-Board EducSim}_i + \\
 & \beta_9 \text{CEO-Board Agedist}_i + \beta_{10} \text{LoneFoundLeadi}_i + \beta_{11} \text{A-TRelatedness}_i + \\
 & \beta_{12} \text{PaymentMode}_i
 \end{aligned}$$

According to these results, our model is now simplified as follow: *Legitimacy* dimension is measured by *BoardComp*, *Qualsnp* and *NedOwnValue* variables, while the *Credibility* dimension remains measured by *BoardDiv*, *BoarSpecExp* and *DirectBus*.

As for the *Monitoring capabilities*'dimension, all the measures were not significant in our previous model, and the hypotheses related to this dimension will be therefore tested through the results of model (1a) presented in Table 5.15. The

Board strategic capabilities dimension is measured by *CEO-Board FuncDist*, *CEO-Board EducSim*, *CEO-Board Age dist* and *LoneFounderLead* variables. Finally, control variables are *A-T Relatedness* and *PaymentMode*

Table 5.17
Logistic regression results- Model (1b)

<i>Dependent Variable: AcquSuccess</i>								
Refitted Model (1b)	B	S.E	Wald	df	Sig	Exp (B)	Hyp.	Status
Intercept	-8,360	2,961	7,969	1	0,005	0,000		
BoardComp	-4,581	1,994	5,276	1	0,022	0,010	(H1)	Supported
Qualsnp	0,546	0,143	14,508	1	0,000	1,726	(H3)	Supported
NedOwnValue	-0,758	1,009	0,565	1	0,452	0,468	(H2)	Rejected
Boarddiv	2,989	1,068	7,830	1	0,005	19,865	(H7)	Supported
BoardSpec Exp	1,362	0,412	10,932	1	0,001	3,903	(H9)	Supported
DirectBus	-0,242	0,305	0,628	1	0,428	0,785	(H11)	Supported
CEO-Board FuncDist	2,079	0,953	4,759	1	0,029	7,993	(H15)	Supported
CEO-Board EducSim	4,160	1,271	10,713	1	0,001	64,047	(H16)	Supported
CEO-Board Age dist	0,101	0,056	3,274	1	0,070	1,106	(H17)	Supported
LoneFounderLead	-0,488	0,265	3,399	1	0,065	0,614	(H20)	Rejected
A-T Relatedness	0,189	0,084	5,091	1	0,024	1,209		
PaymentMode	-1,794	0,750	5,719	1	0,017	0,166		
N						125		
-2log Likelihood						102.405		
Chi-Square (p-value)						60.95 (0.000)		
Hosmer-Lameshaw (p-value)						7.491 (0.485)		
Nagelkerke R2						52,9%		

5.2.2 Results Interpretation and Formal Hypothesis Testing with the Logistic Regression Model

Results from model (1b) in Table 5.17 indicate that the variable *Boardcomp* is a significant negative predictor of Acquisition success ($p < 0.05$) suggesting that acquirers in our sample were more likely to have selected a successful acquisition when their score on the *Boardcomp* is high. These results allow us to accept hypothesis (H1), and could be added to previous studies' results that reported a negative relationship of board composition and firm performance (Beatty and Zajac, 1994).

The probability of the Wald statistic for the variable *Qualsnp* is significant ($p < 0.001$) with a positive relationship with acquisition success suggesting that acquirers in our sample were more likely to have selected a successful acquisition when their score on the *Qualsnp* is high. Our Hypothesis (H3) is therefore accepted.

As for the *NedOwnValue*, our results suggest the absence of any significant relationship with the monetary value of non executive directors' shareholdings relatively to their total pay and the probability of selecting successful acquisitions, which lead us to accept Hypothesis (H2).

BoardDiv variable, measuring the heterogeneity of board members professional backgrounds seems to hold a positive and significant ($p = 0.005$) relationship with acquisition success, which allow us to accept Hypothesis (H7).

Results in Table 5.17 show also a significant ($p = 0.001$) and positive relationship between the *BoardSpecExp* variable and the probability of selecting a successful acquisition. Thus, Boards with Non-executive members with an average of experiences related to the acquirer industries higher than the top management team's experiences is associated with an increase in the likelihood of making a successful acquisition, which lead us to accept hypothesis (H9).

While *DirectBus* variable is not a significant predictor, it tends to hold a negative relationship with the probability of making a successful acquisition. This result supports partially our Hypothesis (H11).

In relation with board demographic attributes, the *CEO-BoardFuncDist* variable, which measures the distance between the CEO's functional background and the average functional background of the board members, is positively and significantly ($p < 0.05$) related to the probability of making successful acquisitions, supporting therefore our hypothesis (H15).

As to the *CEO-Board EducSim* variable, which measure the similarity in the education level between the CEO and the average of Board members, our results

show also a positive and significant ($p=0.001$) relationship with the probability of making a successful acquisitions, suggesting that firms with a CEO and board members having the similar education level were more likely to select successful acquisition, which lead us to accept hypothesis (H16).

Results for Age distance between the CEO and the Board Members, measured by the *CEO-Board Age dist*, indicate that this variable is positively and significantly ($p<0.10$) associated with the probability of making a successful acquisitions, suggesting that firms with a CEO and the average board members belonging to different groups of age were more likely to select successful acquisition, and that our hypothesis (H17) should be accepted.

Our results show also a negative and significant ($p<0.10$) association between the *LoneFounderLead* variable and the probability of selecting a successful acquisition, indicating that the presence of a LoneFounder in the board or as a chairman decreases the likelihood of making a successful acquisition, which lead us to reject hypothesis (H20).

Regarding the control variables, and in line with previous results reported in the literature (Healy et al; 1990; Datta and Puia, 1995; Weech-Maldonado, 2002; Lubatkin and O'Neill, 1987; Flanagan, 1996; Scanlon et al, 1989; Chatterjee and Lubatkin, 1990), the degree of the Acquirer and Target relatedness, measured by the variable *A-T Relatedness*, is positively and significantly ($p<0.05$) related to the probability of making a successful acquisition.

As for *PaymentMode* variable, it was negatively and significantly ($p<0.05$) related with the probability of making a successful acquisition. This result is in line with the findings reported by Myers and Majlounf, 1984.

To finalize our interpretation, we will now return to our results from (Table 5.15) to assess the hypotheses related with the *Board monitoring capabilities* involving the *Auditcom* and *Compcom* variables. We notice that *Auditcom* and *CompCom* were not significant predictors of successful acquisition, which lead us to reject hypothesis (H12). As for *OwnChar* and *Boardten*, no significant relationship

was found with the probability of making a successful acquisition which implies that hypothesis (H14) is accepted, while hypotheses (H5) and (H21) should be rejected.

Finally, the slope coefficients of *CEO-Board FuncDistand* *CEO-Board EducSim* in addition to be significant were higher (in both models 1a and 1b) than those of the *AuditCom* and the *CompCom* variables (which in model (1a) were not significant predictors of successful acquisitions). Hypothesis H22 is therefore supported by our results.

At this stage, our findings support Hypotheses H1, H2, H3, H7, H9, H14, H15, H16, H17, H22 and partially H11, while hypotheses H5, H12, H20, H21 are rejected.

- Investigating the misclassified cases

In order to make a more informed assessment of our variables contribution in the classification of successful versus unsuccessful acquisitions; we have analysed the cases that were misclassified by the model to look at their characteristics and to find out the possible causes for being not correctly classified by the model. To do so, we computed first the predicted probability of a hypothetical case when all the variables are at their sample mean value.

Next, we identified the 15 false positive cases (i.e. cases that were initially coded as unsuccessful but the model has classified as successful-see Table 5.16 and the 13 false negative cases (i.e. cases that were initially classified as success but the model has considered them as unsuccessful- see Table 5.16). We then, computed the mean values of each group and the predicted probabilities associated with each of them to end with the average predicted probability for each group.

Finally, we computed for each variable the marginal impact of the departure from the mean for the two groups. The results of these computations are separately showed in Tables 5.17a and 5.17b for the group of the False Positives (FP) and in Tables 20c and 20d for the group of False Negatives (FN).

We note that the average predicted probabilities of the FP group is around 0,61, while the predicted probability associated with the sample mean values for all the variables was 0,24. The latter predicted probability was obtained by taking the mean values of all the variables (see Table 5.8) and use them in model 1b to extract the Log of the odds, and then compute the antilog ($e^a/1+e^a$, where $a = \text{Log odds}$) of the latter to obtain the corresponding predicted probability. The total variation between the average predicted probabilities of the FP group and the predicted probability using the mean values was 0,37 point (0,61-0,24) or 154%.

Table 5.17a
False Positives (FP) Classification and predicted probabilities

Case #	Initial Classification	Predicted probability (model 1b)	Model Classification n
5	0	0,51	1
17	0	0,66	1
30	0	0,67	1
40	0	0,55	1
46	0	0,81	1
49	0	0,52	1
54	0	0,67	1
63	0	0,51	1
64	0	0,50	1
68	0	0,51	1
88	0	0,77	1
101	0	0,70	1
122	0	0,58	1
130	0	0,61	1
133	0	0,61	1
Groupe FP Average (p1)		0,61	
Sample variables Mean values (p2)		0,24	
Odds associated with Group FP average ($p1/(1-p1)$)		1,58	
Odds associated mean values ($p2/(1-p2)$)		0,32	
Variation% in predicted probabilities		155%	
Variation in Odds		560%	
N= 15			

We can conclude from Table 5.17b that for a positive departure of 1,43 in its score, the contribution of the *Qualsnp* variable (while holding constant all the other variables at their mean values) accounted for 47% (0,17/0,37) of the total variation and raised the predicted probability from 0,27 to 0,44 with an increase of 0,17 point, that is, a 63% increase in the predicted probability for the FP group when compared to the probability predicted by the *Qualsnp* mean value.

Table 5.17b
Variables' contribution in the predicted probability of False Positives (FP)

	(1)	(2)	(3)	(4)	(5)*	(6)	(7)	(8)
	Sample Mean Values	FP Group Mean Values	Departure (2)-(1)	Departure from Sample Mean [(2)-(1)]/(1)	Logg odds (a)	FP Predicted probability $e^a/(1+e^a)$	Marginal Net Effect	Weight (7)/0,37
Constant	-8,36	-8,36			-8,36	0,00	0,00	0%
Variables								
BoardComp	0,717	0,689	-0,0280	-3,90%	-1,018	0,27	0,03	8%
Qualsnp	2,37	3,80	1,4300	60,34%	-0,238	0,44	0,17	47%
NedOwnValue	0,810	0,731	-0,0785	-9,70%	-0,178	0,46	0,01	4%
BoardDiv	1,640	1,819	0,1793	10,93%	0,350	0,59	0,13	35%
BoardSpecExp	1,058	1,039	-0,0190	-1,80%	0,324	0,58	-0,01	-2%
DirectBus	0,000	-0,091	-0,0908		0,346	0,59	0,01	1%
CEO-B FuncDist	0,629	0,699	0,0701	11,15%	0,492	0,62	0,03	9%
CEO-B EducSim	0,273	0,331	0,0579	21,24%	0,735	0,68	0,06	15%
CEO-B Age Dist	11,142	10,454	-0,6881	-6,18%	0,665	0,66	-0,02	-4%
LoneFounderLead	0,000	-0,076	-0,0764		0,702	0,67	0,01	2%
A-T Relatedness	5,008	5,067	0,0587	1,17%	0,714	0,67	0,00	0%
Payment Mode	0,583	0,724	0,1417	24,33%	0,460	0,61	-0,06	-16%
N= 15						Total Var:	0,37	100%

*Logistic regression model 1b in Table 5.17 with average FN group values through manual stepwise procedure

Regarding the contribution of the *BoardDiv* Variable in the classification of the FP cases, we could also notice a significant association with the improvement of the predicted probability of this group when compared to the probability predicted by the mean values. Indeed, a positive departure of 11% in the *BoardDiv* score was associated with an increase from 0,46 to 0,59 or 28% in the average predicted probabilities of the FP cases when compared to the predicted probability with the mean value (Table 5.17b). The total contribution in the variance between the predicted probabilities of the FP group and the the predicted probability by the the mean value was about 35% (0,13/0,37).

Results in Table 5.17b confirm our conclusion, by showing us that a positive departure from the mean of about 21% in the *CEO-Board EducSim* variable was associated with an increase from 0,62 to 0,68 or about 10% in the average predicted

probability of the FP group when compared to the probability obtained with the mean value. Contribution to total variance in the average predicted probability was also about 15% (0,06/0,37). It seems therefore that the most significant variables associated with the classification of FP were the *Qualsnp*, *BoardDiv* and *CEO-EducSim* variables.

Other results show that predicting the success probability for the FP Group, was also related with a positive departure of about 11% from the mean value for the variable *CE-Board FuncDist* that was associated with an increase of the average predicted probability from 0,59 to 0,62 or about 5% when compared to the predicted probability obtained with the mean value.

We will turn now to the analysis of False Negatives (FN) results presented in Tables 5.17c and 5.17d. The variation in the predicted probability was somewhat trivial with an average of group predicted probability of making a successful acquisition of 0,26 compared to 0,24 (Table 5.17c) when we use the mean values.

Table 5.17c
False Negatives (FN) Classification and predicted probabilities

Case #	Initial Classification	Predicted probability (model 1b)	Model Classification
11	1	0,38	0
58	1	0,34	0
61	1	0,24	0
69	1	0,20	0
77	1	0,23	0
78	1	0,37	0
81	1	0,20	0
82	1	0,22	0
89	1	0,33	0
96	1	0,31	0
106	1	0,19	0
119	1	0,16	0
132	1	0,26	1
Groupe FN Average (p1)		0,26	
Sample variables Mean values (p2)		0,24	
N= 13			

In the light of these results, we examined more closely the characteristics of the cases that were classified as False Positive in order to investigate the possible causes of this misclassification. First, we looked at the acquisition dates to see if these cases were related to a specific year or period with extraordinary economic conditions that could have affected the ROA of these acquirers. The involved acquisitions were conducted at different moments between 2000 and 2001 and no pattern in relation to acquisition date was identified.

Next, we looked at the arguments of our initial classification of these cases as a failure. We found that all the False Positives satisfied conditions 1 and 2 for our dependent variable, that is, no divestment in the acquisition under study was made during the 2 to 5 years after the event and no goodwill write-offs of more than 10% were reported in the 2 to 5 years following the acquisition. However, we found that 6 cases out of 15 were firms that satisfied the two first conditions but were themselves acquired by other firms in takeover deals, which led us to classify them as a failure. Thus, the remaining suspect of this misclassification becomes the positive improvement in ROA which was the main cause for initially classifying the 9 remaining cases as unsuccessful acquisitions. For 6 cases out of 9 the negative improvements of the ROA was not very important (around 3 percentage points) which could shed some doubt about our initial judgement on classifying them as failures.

Given the limitations associated with the ROA measures (risk of manipulation, accounting methods for acquisitions, industry and general economic factors...etc.) we notice that our initial judgement could have been affected by other factors that we have not controlled for. Initial failure classification concerned 80 cases, for which ROA improvements were responsible for 41 initial classifications, while Goodwill write-offs were associated with 4 cases and divestment for 24 cases. As for the remaining cases, 5 acquirers went bankrupt in the following year of the acquisition under study and 6 were themselves taken over.

To investigate further the contribution of our variables we used the same procedures as explained above for the indicators of the FN group.

We observe in Table 5.17d that all the significant variables are again in play with significant individual contributions, but they're largely offsetting one another. Thus, the positive effect of the *BoardDiv* variable was offset by a decrease in the *BoarSpecExp* and *CEO-Board Age distance*, while an increase in the *Qualsnp* effect was offset by an increase in the *BoardComp*, the *A-T relatedness* and the *PaymentMode*.

As for the FP cases, we push further our analysis in order to find out why are these cases scoring close to the mean were initially classified as successful acquisitions. Recalling our classification rules, all these cases should have respected the three conditions. Here again, we think that the principal suspect of these misclassification is probably the improvements in ROA rule. Indeed, 10 out the 13 misclassified cases showed a slight improvement in the ROA that was around 1 percentage point. The remaining three cases were positive improvements but associated with negative post and pre acquisition ROAs.

Table 5.17d
Variables' contribution in the predicted probability of False Negatives (FN)

	(1) Sample Mean Values	(2) FN Group Mean Values	(3) Departure (2)-(1)	(4) % Departure from Sample Mean [(2)-(1)]/(1)	(5)* Logg odds (a)	(6) FN Predicted probability $e^a/(1+e^a)$	(7) Marginal Net Effect
Constant	-8,36	-8,36			-8,36	0,00	0,00
Variables							
BoardComp	0,717	0,725	0,0073	1,02%	-1,181	0,23	-0,01
Qualsnp	2,37	2,846	0,4762	20,09%	-0,921	0,28	0,05
NedOwnValue	0,810	0,842	0,0326	4,03%	-0,946	0,28	0,00
BoardDiv	1,640	1,771	0,1308	7,97%	-0,562	0,36	0,08
BoardSpecExp	1,058	0,837	-0,2217	-20,95%	-0,864	0,30	-0,06
DirectBus	0,000	-0,036	-0,0359		-0,855	0,30	0,00
CEO-B FuncDist	0,629	0,681	0,0527	8,38%	-0,746	0,32	0,02
CEO- B EducSim	0,273	0,293	0,0206	7,54%	-0,660	0,34	0,02
CEO- B Age Dist	11,142	10,314	-0,8283	-7,43%	-0,744	0,32	-0,02
LoneFounderLead	0,000	0,127	0,1270		-0,806	0,31	-0,01
A-T Relatedness	5,008	4,769	-0,2388	-4,77%	-0,851	0,30	-0,01
Payment Mode	0,583	0,683	0,1002	17,20%	-1,030	0,26	-0,04
N= 13	Total Var:						0,02

We can conclude that the significant variables as reported in Table 5.17 were the main variables that affected the classification of the cases in our sample. The false positives and the false negatives were thus mainly classified by the model on the basis of the score obtained for the *Qualsnp*, *BoadDiv*, *BoardSpecExp*, *CEO-Board FuncDist*, *CEO-Board EduSim*, *BoardComp* and *PaymentMode*.

5.2.3 Additional analysis of the Logistic Model Robustness and Accuracy Testing Through Bootstrapping and ROC Analysis

In order to test the Robustness of model (1b) a Bootstrap procedure, along with a Receiver Operating Characteristic (ROC) analysis were employed to validate the predictive accuracy of our model.

Internal validation of predictive models could be achieved by splitting the sample population into training and a validation samples in order to measure model performance on similar but independent data (Picard and Berk, 1990). In order to test our model, we opted for the bootstrapping method given the small size of our sample and the superiority of the Bootstrap procedure to other cross-validation methods as confirmed by various statisticians (Gude et al, 2009; Steyerberg et al, 2001; Harrel, 2001; Harrel et al, 1996; Efron and Tibshirani, 1993).

Bootstrapping consists in replicating the process of sample generation on the same population by drawing random samples with replacement from the original data (Harrel et al, 1996). The Bootstrapping option in SPSS 21 with 1000 samples was used to test our model and the results (Table 5.18) validate our findings with the original sample.

To test further the accuracy of our logistic model we decided to use the Receiver Operating Characteristic (ROC) analysis to assess the classification performance of model (1b). ROC Analysis consists in generating a ROC Curve assessing how well group membership (in our case, successful acquisitions Vs unsuccessful ones) is predicted through the combination of true-positive rates (cases who have been correctly predicted as having a positive outcome) and false-positive

rates (cases with a negative outcome incorrectly predicted as having a positive outcome). Thus, the true-positive rate, also designated as the *Sensitivity* rate is considered as the Y axis, while the false-positive rate, designated as (*1-Specificity*) is considered as the X axis (Fawcett, 2006; Meyers et al , 2012).

Table 5.18
Logistic regression results- Model (1b) with the Bootstrapping method

Refitted Model (1b)	B	Bias	S.E	Sig (2- tailed)	Hypoth.
Intercept	-8,360	-2,421	3,985	0,005	
BoardComp	-4,581	-1,002	3,035	0,028	(H1)
Qualsnp	0,546	0,121	0,195	0,001	(H3)
NedOwnValue	-0,758	-0,159	1,632	0,538	(H2)
Boarddiv	2,989	0,999	1,422	0,002	(H7)
BoardSpec Exp	1,362	0,336	0,543	0,001	(H9)
DirectBus	-0,242	-0,082	0,464	0,489	(H11)
CEO-Board FuncDist	2,079	0,356	1,224	0,021	(H15)
CEO-Board EducSim	4,160	0,941	1,813	0,001	(H16)
CEO-Board Age dist	0,101	0,019	0,074	0,077	(H17)
LoneFounderLead	-0,488	-0,100	0,387	0,098	(H20)
A-T Relatedness	0,189	0,048	0,125	0,032	
PaymentMode	-1,794		0,750	0,017	

Using the ROC procedure in SPSS 21, we first saved the predicted values generated by our logistic regression model (1b) for all the cases included in the analysis (these are the predicted probabilities of a case belonging to the target group given the threshold of 0,5), then we introduce this values as a *Test variable*, while the AcquSuccess as the *State variable* specifying that success is designated by cases showing a value of 1 and unsuccessful is represented by the cases with the value of 0.

The area under the ROC curve shown in Figure 5.2, which range from 0 to one, provides the ability of our logistic model (1b) to discriminate between the cases experiencing an acquisition success versus those who experienced an unsuccessful one. This ability of discrimination, measured by the Area under the Curve (AUC)

parameter is about 0,84 (Table 5.19), which means that our logistic model have an excellent discrimination ability (Hosmer and Lameshaw, 2000).

Table 5.19
Logistic Model (1b)- Area Under the Curve

Test Result Variables : Predicted Probability				
Area	Std.Error ^a	asymptotic ^b Sig.	Asymptotic 95% Confidence Interval	
			Lower Bond	Upper Bond
,840	,034	,000	,774	,907

a. Under the nonparametric assumption

b. Null hypothesis: true area = 0.5

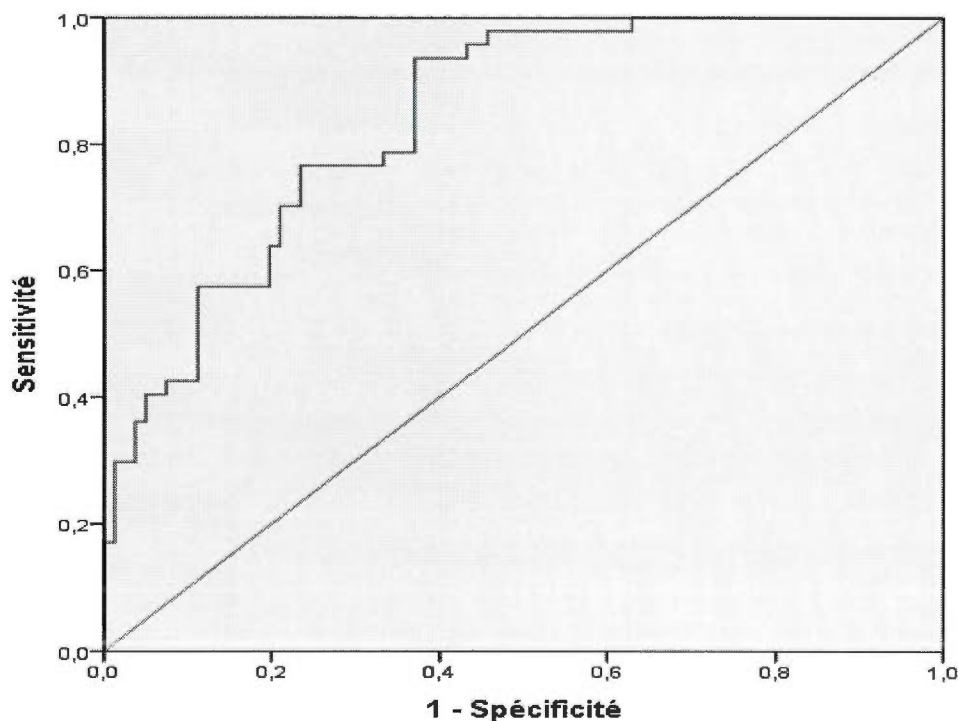


Figure 5.2: Logistic Model (1b)- ROC Curve

All in all, our tests in addition to the parameters of the goodness of fit presented in section 5.2.2 allow us to conclude with confidence that our logistic model is robust and that its ability to discriminate between successful and unsuccessful acquisitions ranges from good to excellent if we consider the standard

error of 0,034, which implies that with a 95% confidence interval the AUC is still situated between 0,774 and 0,907 (Table 5.19).

5.3 Analysis, Results' interpretation and formal hypotheses testing with the OLS regression model

As discussed in chapter V, OLS regression was used to test our hypotheses H4, H6, H8, H10, H18 and H19. Using a continuous variable $\Delta ROAi$ computed as the difference between ROA_{posti} and ROA_{prei} of all the cases that were classified as successful acquisitions.

Our objective is to measure which variables contribute to create more economic value in the context of successful acquisitions, however the OLS procedures require a more rigorous analysis in order to comply with its main underlying assumptions. Thus, in addition to the multicollinearity problems treated in the precedent sections, OLS regression should conform to the conditions of the linearity between the dependent and the independent variables, the constant variance of the error terms, the independence of the error terms and the normality of the error terms' distribution (Hair et al, 1997).

We started by analyzing all the variables' distribution histograms, *Kurtosis* and *Skewness* values along with Shapiro-Wilk test to identify any departure from normality and proceed to any eventual transformations. For linearity we will examine the residuals plot after running the initial model.

The first issue was in relation to $\Delta ROAi$ with a *Skewness* value of -0,905 but a *Kurtosis* value of 1,942. To correct this problem, we transformed $\Delta ROAi$ into $\text{Log}(\Delta ROAi)$ which after verification, corrected the initial departure from normality. After proceeding in the same way as explained above with all our independent variables, we ended with the following ones as the predictors for our OLS model: *Qualsnp*, *BoardDiv*, *BoardSpecExp*, *CEO-Board FuncDist*, *CEO-Board EducSim* and the *A-T Relatedness* as a control variable. Initial Equation (2) presented in chapter 4 was

therefore adjusted according to this procedure, ending with the following final equation:

$$(2a) \text{ Log } (\Delta ROA_i) = \beta_0 + \beta_1 \text{Qualsnpi}_i + \beta_2 \text{SignShareholderRep}_i + \beta_3 \text{Boarddiv}_i + \\ \beta_4 \text{BoardSpecExp}_i + \beta_5 \text{Auditcom}_i + \beta_6 \text{CEO-Board FuncDist}_i + \\ \beta_7 \text{CEO-Board EducSim}_i + \beta_8 \text{A-TRelatedness}_i + U_i$$

The final sample that satisfied the conditions of acquisition success and the computation of $\text{Log } (\Delta ROA)$ was constituted by 32 cases to be used for the assessment of equation (2a). Although we ended with 51 cases that were successful acquisitions (See Table 5.10), 19 cases were improvements of negative ROAs (for example the ROApre-acquisition was -12% and the ROApost-acquisition was -6%) which is a positive improvement of 6 percent points) but the Delta ROA is not meaningful (with a decrease rate of -5%) given the presence of negative values.

Thus, to eliminate the effect of magnitude in the difference between ROApost-acquisitions and ROApre-acquisitions (given the fact that the acquirers in our sample come from different industries and sectors), the ΔROA makes it possible to assess better the improvements of ROA for successful acquirers. The (ROApost-acquisition-ROApre-acquisition) average of the 40 unsuccessful acquirers that satisfied only conditions 1 and 2 (see Table 5.10) was -11,77 percentage point, while the average of this difference was 9,2 percentage points for the 51 successful acquirers that satisfied all the conditions. As for the 32 cases out of 51, for which it was possible to compute the ΔROA , the average of the improvement rate was 67%.

The prediction model of ROA improvements for successful acquirers was statistically significant $F(8, 23)=2,574$, $p<0,05$ and accounted for approximately 47% (29% when adjusted) of the variance of $\text{Log } (\Delta ROA)$ (see Table 5.20). The regression coefficients of all the predictors are shown in Table 5.20. *BoardDiv* was positively and significantly ($p<0,10$) related to the improvements of ROA for successful acquirers, which leads us to accept Hypothesis H8.

Table 5.20
OLS regression results

Dependent variable: <i>Log (ΔROA_i)</i>				
Model (2a)	Coeff.	VIF	Hypoth.	Status
Intercept	-3,952**			
Qualsnp	0,031	2,010	(H4)	
SignShareholderRep	-0,455	1,608	(H6)	
BoardDiv	3,204**	1,247	(H8)	Supported
BoardSpec Exp	0,329***	1,556	(H10)	Supported
Auditcom	0,545	1,419	(H13)	
CEO-Board FuncDist	0,068	1,360	(H18)	
CEO-Board EducSim	1,505**	1,266	(H19)	Supported
A-T Relatedness	0,049	1,158		
N	32			
R ²	47,2%			
R ² Adjusted	29%			
Reg.Model df	8			
Res.Model df	23			
Model F	2,574			
Model Sig.	0,036**			
* $p < 0.01$				
** $p < 0.05$				
*** $p < 0.10$				

Another interesting and original finding is the positive and significant relationship ($p < 0,05$) of *BoardSpecExp* and the improvements of ROA for successful acquirers. As defined previously, the *BoardSpecExp* measures the relative experience of the board members relatively to the top management team, accounting therefore for the problem of information asymmetry between the principal and the agent. Our results suggest that boards with more industry experience relatively to managers will suffer less from information asymmetry, which is positively and significantly associated with firm performance in the context of M&A operations. Hypothesis H10 is therefore accepted.

In relation to the level of education, the similarity between the CEO and the Board members, as measured by the *CEO-Board EducSim* variable, holds a positive and significant ($p < 0.05$) relationship with the improvements of ROA in the context of successful acquisitions, which lead us to accept Hypothesis H19.

Hypotheses H4, H6, H13 and H18 should be rejected as the *Qualsnp*, *SignShareholderRep*, *Auditcom* and *CEO-BoardFuncDist* variables were respectively not significantly related to the Improvement of the ROA as measured by *Log (Δ ROA)*.

In order to assess the linearity assumption, we first analysed the residuals regression plots (Figure 5.3). The analysis of this figure does not show any significant departure from linearity, ensuring that the overall equation is linear. As we have 8 independent variables, we have performed the same analysis as in Figure 5.3, but with the partial regression plots of each one of our predictors (not reported). Like in the case of residuals, no pattern of nonlinearity was observed which indicates that the assumption of linearity for each independent variable in our model is met.

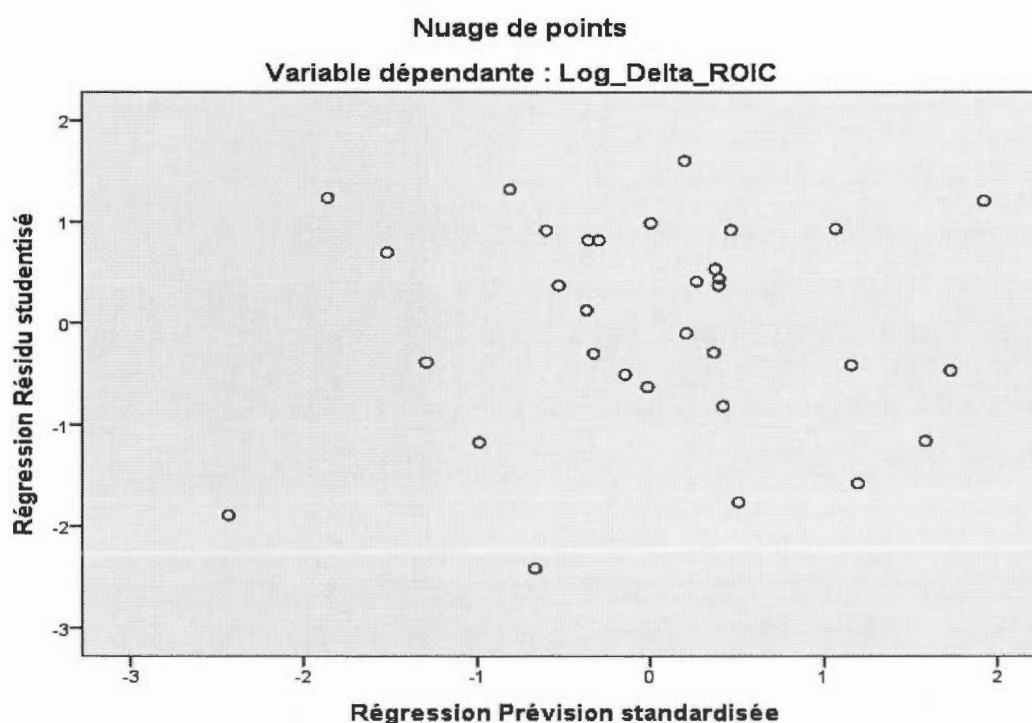


Figure 5.3: OLS Residuals Regression plots n

Finally, and given the endogeneity problem encountered in the models used in the corporate governance studies (Agrawal and Knoeber, 1996; Weisbach and

Hermalin, 2000; Bhagat and Black, 2002), further analysis should be conducted to ensure that our results are not biased. The endogeneity problem may for example be illustrated by the fact that firm performance could be, at the same time, the results of board diversity and a factor that will influence the degree of diversity in subsequent board composition. Put simply, a variable is considered as endogenous when it is correlated with the error term in a regression model. In the case that an endogeneity issue is detected, the standard OLS could not be performed as the coefficients would be biased and a two-stage (2SLS) least squares regression is therefore needed.

In order to assess this phenomenon, we used instrumental variables to perform the Hausman test (Hausman, 1978) for the detection of any endogeneity problem. To assess the endogeneity for our 8 independent variables in equation 2a, we performed 16 OLS regressions as follow:

- 1- In the first step we considered separately each independent variable in equation 2a (e.g. *BoardDiv*) as a dependent variable using a set of instrumental predictors, chosen among our variables, to run an OLS regression and save the unstandardized regression errors from this step as a new variable (e.g. *UEBoardDiv*);
- 2- We performed an OLS on equation 2a adding the unstandardized regression errors' variable (e.g. *UEBoardDiv*) obtained in step 1 along with the independent variable of interest (e.g. *BoardDiv*) and all the other 7 variables;
- 3- We verified that the coefficient of the unstandardized regression errors' variable (e.g. *UEBoardDiv*) is not significant. Thus, when this term is not significant, we can conclude that the variable is not affected by an endogeneity issue.

When applied to our predictors in model 2a, The Hausman test (as described above) yielded no endogeneity problems, ensuring that our coefficients were not biased and that there was no need for the use of any simultaneous equations. Although not reported, the details of these analyses are available under request.

In summary, our findings from the OLS regression model support hypotheses H8, H10 and H19, while hypotheses H4, H6, H13 and H18 should be rejected.

5.4 Findings and discussion

In this section we will discuss our findings in relation to the dimensions of our theoretical model presented in chapter 3, as well as to corporate governance literature and board of directors' role in the context of mergers and acquisitions.

5.4.1 Discussion of findings in relation to *Pillar I: Board Legitimacy*

When *Board legitimacy* is based on the outsider or the independent status of directors, measured by the *BoardComp* Variable our findings suggest a statistically negative relationship with the firm ability to select successful acquisitions. This finding could be explained by the flawlessness of the directors' independency concept when measured by the proportion of Non executive directors based on the absence of a material relationship between the firm and the director. The tenants of the Agency perspective (Fama and Jensen, 1983; Baysinger and Hoskisson, 1990) have probably overestimated the theoretical positive effect expected from the presence on the board of a large majority constituted by outside members, which could be reversed by an exacerbated information asymmetry when these directors are lacking specific information, expertise and knowledge about the company and its businesses (Walsh and Seward, 1990; Allaire and Firsirotu, 2003; Van den Bergh and Levrau, 2004).

Hence, severe information asymmetries suffered by the so called *independent* directors will imply, therefore, a passive implication of the board in the firm decision making processes, in addition to an awkward accomplishment of its decision control role, as prescribed and expected by agency theory.

However, when *Board legitimacy* is based on the quality of the directors' selection processes, measured by the *Qualsnp* variable, we found a positive and significant relationship with the probability of making a successful acquisition. Thus,

boards with a high quality selection and nomination processes are associated with a noticeable increase in the likelihood of selecting successful acquisitions, that is, Boards of directors (1) having a nominating committee; (2) providing a clear description of their selection process; (3) having a majority of the committee members seating in other firm's nomination committees; (3) having and/or divulgating updated long-term plans for the composition of the board that take into consideration the strategic direction of the corporation; (4) defining diligently the ideal mix of director's qualifications; (5) having a majority of independent directors seating in the nomination committee and (6) using the service of external advisers.

This finding raise the critical importance of board selection processes and given that our measure is a composite index of various aspects, it will be interesting to further investigate which components among those used in our index are most important in improving the quality of board selection processes in order to make a more accurate evaluation. Eventhough our tests identified no multicollinearity or endogeneity problems, several authors have indicated that *Board selection* could be endogenously determined (Hermalin and Weisbach, 2003, Bhagat and Black, 2002) and that firm anterior performance could have affected the selection process and vice versa. Here again, our finding opens the door for further investigation in order to understand better how the board selection processes could be improved in order to nominate truly legitimate directors who will contribute significantly in firm's strategic decisions. Nevertheless, our results support the statement that nomination committees with established working procedures and relevant resources will constitute an important institutional mechanism that improve directors' selection and independence as suggested by Ruigrok et al (2006) and that independence could contribute significantly in making sound strategic decisions such as in the case of mergers and acquisitions.

As expected, *Board legitimacy* based on directors' ownership is not statistically significant when related to the firm probability of making successful acquisitions. This finding does not support the agency theory view claiming that director's compensation plays a significant role in improving firms' strategic decisions and consequently firm performance (Bothwell, 1981; Kesner, 1987; Kren and Kerr,

1997; Bhagat et al, 1999; Zajac and Westphal, 1995; Morck et al, 1988), and is rather in line with the findings of Hayes et al (2004). As in the case of insiders, we may explain this result by considering that outsiders, when possessing a significant portion of firm's shares, could be induced to exert insufficient effort, tolerate that managers maximize private benefits or adopt entrenchment behaviour (Morck et al, 1988, Short and Keasey, 1999).

5.4.2 Discussion of findings in relation to *Pillar I: Board Credibility*

Board Credibility based on the diversity of occupational backgrounds, measured as the heterogeneity of director's occupational backgrounds, is positively and statistically related to the probability of making successful acquisitions. In addition, Board diversity is also positively and significantly related to acquisition performance measured as the improvement of firm's ROA.

Occupational backgrounds diversity tends to conjointly capture experience, information, and perspectives relevant to cognitive tasks performed by the Board members (Simons et al, 1999 p. 663) and Directors with different backgrounds bring different perspectives and opinions, complementary skills and knowledge (Forbes and Milliken, 1999), which may facilitate advice and counsel (Baysinger and Butler, 1985; Hillman and Dalziel, 2003). This finding is in line with those reported by previous studies linking Top team management diversity and firm performance (Cannella et al, 2008; Eisenhardt and Schoonhoven, 1990; Norburn and Birley, 1988).

Our results show that what most matter in the board composition is not the mix of outsiders/insiders but rather the diversity of their occupational backgrounds which makes boards more effective as stated by Allaire and Firsirotu, (2009): "*while it is legitimacy that gives a board the right and the authority to impose its will on management, it is credibility that makes a board effective and value-creating* (2009, p. 254). Finally, directors' occupational background diversity could constitute a hard to imitate governance resource that provides the firm with an essential ingredient of value creation. These findings support therefore the Value Creating Governance

perspective, the resource dependence theory, the socicognitive branch of the institutional theory and the Resource Based view.

Another source of *Board Credibility* is the reduction of the information asymmetries that stem from the lack, by Directors, of firm's industry specific experience and knowledge. The *BoardSpecExp* variable that captures the relative degree of industry specific experiences between board members and the three top managers was a positive and significant predictor of the probability of making successful acquisitions. In addition, *BoardSpecExp* is also positively and significantly related to the improvements of ROA in the context of successful acquisitions. These findings fill the gap in the literature of corporate governance by introducing an original measure of Information asymmetry which was not considered in previous research. While eliminating the management information asymmetry advantage (generally stemming from various sources such as the access to privileged strategic, financial or operational information) is practically impossible, the significant reduction of its negative effects could be achieved when the average board members have superior and extensive knowledge about firm industries and businesses comparatively to the firm top managers' average industry specific experiences.

Thus, credible boards with a relatively lesser information asymmetry disadvantage due to outside directors' industry knowledge will increase their ability to challenge management proposals, to bring a critical view on management decisions and to contribute effectively in firm decision making processes, which, as our results suggest, is found to be positively and significantly related with the probability of selecting successful acquisitions that create higher economic value.

As expected, *Board Busyness* is not necessarily a source of *Board credibility* as supported by the tenets of the resource dependence theory. Our results tend to be in line with those reported by Fich and Shivdasani (2006) holding the view that busiest directors holding more than three directorships at the same time do not significantly contribute to firm value creation and are likely to lack sufficient time and energy to involve their selves actively in firm key strategic decisions such as in the case of mergers and acquisitions.

While other researchers have reported a positive relationship between *Board busyness* and firm performance (Ferris et al, 2003; Perry and Peyer, 2005; DiPietra et al 2008), our results suggest that, although not statistically significant, Boards with a majority of directors holding multiple directorships at the same time are negatively related to the probability of making successful acquisitions, which supports partially the view that the positive effects of directors' busyness such as complementing inside directors with knowledge on M&A issues and obstacles or helping in the reduction of decision making biases (Harris and Shimizu, 2004) are likely to be reversed by the negative ones, such as the lack of time and energy to participate actively in the firm acquisition processes.

5.4.3 Discussion of findings in relation to *Pillar II: Strategic Processes, Dialogue and Board Strategic Capabilities*

While Board *Legitimacy* and *Credibility* reflect the quality of governance resources (Directors' nomination, diversity of valuable occupational diversity and industry specific knowledge and experiences), *Board strategic capabilities* refer to the firm specific, and difficult to imitate, corporate governance processes and board capacity to use the acquired governance resources and competences available to the firm in order to achieve a competitive advantage by, at least, lowering effectively the agency costs, and ideally by contributing to generate superior economic rents through directors' active and effective involvement in firm strategic decision making processes (Bouzinab, 2005; 2006). In order to test Allaire and Firsirotu's (1993; 2003, 2004; 2009) second pillar, namely strategy processes and dialogue as one of the essential pillars for governance to create value, we used the concept of *Board strategic capabilities* to assess the quality of firm strategic processes and dialogue between board members and firm's managers.

Thus, *Functional distance* between the CEO and the Board was used as the first proxy for *Board strategic capabilities* and our findings show a significant and positive relationship of this measure with the probability of making successful acquisitions. This result is in line with those reported by Korn et al, (1992) in the context of Top Management Team diversity and could indicate that boards having a

different functional background from the CEO will experience better strategic decision processes and debate (Simons, 1995), which in turn contribute to firm performance, in our case through making successful acquisitions.

The second variable used to proxy the *Board strategic capabilities* is the similarity of the educational level between the CEO and the Board of directors' members. Our results show a strong significant and positive relationship with both the probability of making successful acquisitions and with the improvement of the acquirers' ROA. As reported by Westphal and Zajac (1995), Educational level was previously found to be related with the capacity of information processing (Schroder et al, 1967 drawn from Westphal and Zajac, 1995), a higher rate of innovation and higher rate of strategic change (Bantel and Jackson, 1989; Wiersema and Bantel, 1992). Thus, we could argue that *Board strategic capabilities* are enhanced when board members and the CEO have similar educational levels which will contribute, through the facilitation of strategic information processing and strategic dialogue (i.e. Pillar II of the Value Creating Governance perspective), to increase the probability of making successful acquisitions.

Furthermore, our results show that Age Euclidian distance between the CEO and the Board of directors' average age was also significantly and positively related to the probability of making a successful acquisition. However, this positive relationship, although significant, is relatively marginal when compared to the magnitude of the relationship of functional background distance, educational similarity between the CEO and the Board members and the probability of making a successful acquisition. Moreover, this result points out the importance of age distance between the Board members and the CEO and its effect on their respective attitudes toward risk taking for instance.

Indeed, previous studies show that young executives are generally more likely to take risks than their older colleagues (Vroom and Pahl, 1971; Rhodes, 1983; Hitt and Tyler, 1991 drawn from Westphal and Jazac 1995) which lead them to differently evaluate acquisitions' proposals and make different selections as reported by Hitt and Tyler (1991). Furthermore, older executives seem to seek more

information and to take more time before making their decisions than their younger counterparts (Taylor, 1975 in Westphal and Zajac, 1995). On the light of these arguments, we could explain our results by arguing that the age distance between the CEO and the Board members will act as a balancing mechanism. Thus, in the case of a young CEO, a Board with a majority of old members will prevent him from higher risk taking attitudes and faster decisions making without extensive information, while in the case of an older CEO, a relatively younger Board will push him to consider more risky options and to proceed more quickly with the acquisition deals.

In relation to the Lone founder effect, our results do not support the proposition that the existence of a Lone Founder or occupying the Chair position by a Lone Founder are related to the firm probability of making successful acquisitions. While this proposition was theoretically hypothesized but never tested by Miller and Le Breton-Miller (2006), our results do not support this claim. However, this variable was entered as a factor score, which leads us to consider with caution a formal rejection of their hypothesis.

Finally, Board Heterogeneous tenure seems to not hold a significant relationship with the probability of making successful acquisitions, which is line with previous results reported by Bantel and Jackson, (1989); Wiersema and Bantel (1992), Smith et al, (1994).

5.4.4 Discussion of findings in relation to *Pillars III and IV: Information Processing, Compensation Setting and Board Monitoring Capabilities*

Board Monitoring Capabilities was measured by using three variables *AuditCom*, *CompCom* and *OwnChar*. The *Auditcom*- representing the proportion of the audit committee members possessing financial literacy, accounting skills and previous acquisition experiences as board members or as executives- was positively but not significantly related to the probability of acquisition success nor to the improvement of ROA in the context of successful acquisitions. This result could

appear, at first sight, as being surprising given the importance of the audit committee as a monitoring mechanism, but we could argue that while the audit committee will have members with financial and acquisition experiences, their real contribution will intervene to ensure proper methods of accounting for acquisition in the reporting stage and not necessarily during the pre-acquisition process. While due diligence could play an important role in selecting a successful acquisition, audit committees with higher proportion of members with financial and accounting expertise generally intervene in the review of financial statements once the acquisition is done and not necessarily during the acquisition process. Another possible explanation of this result is that variations among audit committees composition in the sample are limited by the legal requirements in regard of audit committee structure and composition.

As for the *CompCom* we found no significant relationship with the probability of making successful acquisitions or with the improvements of the ROA in the case of successful acquisitions. As our variable is a composite score of several components such as the experience and ownership of the committee members or the nature of the CEO pay package, it could hide important variations between the individual components and therefore affect its relationship with the dependent variable. However, and due to the limited size of our sample, the adoption of these components separately would weaken the prediction power of our model by decreasing dramatically the ratio of observation to the independent predictors. Our results suggest however that the adoption of a composite score for this measure as proposed by Sun and Cahan (2009) yield no significant effects on firm acquisition success. Further investigation could be done in the future by analysing the different components and by considering new independent variables that would measure better the relationship between the monitoring effect of compensation committee and acquisition performance.

The final measure of *Board monitoring capabilities* was the *OwnChar* variable which was also not a significant predictor of successful acquisitions. Although *OwnChar* was not conceptualized during the initial theoretical development of our variables, it was adopted following the factor analysis step which generated a factor

component that comprised the *SignShareholder*, *SignShareholderRep*, the *FamilyBoard*, the *FamilyControl* and *Dualshare* variables. To avoid multicollinearity problems we decided to consider the variable factor score that we labelled *OwnChar* given that all these variables reflected the ownership characteristics of the firm. Our results are difficult to interpret given the implication of several variables, but we could conclude that family firms with significant shareholding represented in the board of directors, and using dual shares seem to be not a significant predictor of firm acquisition success. Furthermore, we ran several logistic models by including one of these variables without the others to identify if there is any significant effect that an individual variable could exert on the probability of the acquisition process, but no one of these models generated a different result from that obtained by the variable factor score.

In line with the previous studies discussed through the literature review in chapter 2, our two control variables were also significantly related to the acquisition success. The relatedness between the acquirer and the target *A-T Relatedness* was positively associated with acquisition success, while the proportion of shares to cash for acquisition payment, measured by the *PaymentMode* variable was negatively and significantly related with the probability of making a successful acquisition.

5.5 Chapter conclusion

In this chapter we have presented the results of the factor analysis, the logistic and the OLS regression models. The factor analysis led us to adopt three variable factor scores to avoid multicollinearity issues and to reformulate our measurement model by reconsidering our initial equations on both the logistic and the OLS regressions steps.

Our logistic model exhibited a robust prediction power with an overall 77% classification rate, classifying correctly successful acquisitions in 71% of the cases and unsuccessful acquisitions in 81% of the cases at the 0,5 cut-off. The logistic model accounted for 53% of the variance. The ROC Analysis showed an Area Under the Curve (AUC) rate of 0,84 which is considered by Hosmer and Lamshaw (2000)

as an indication that the discrimination ability of the model could be considered as ranging between good to excellent.

To further test the robustness and the stability of our logistic model we have conducted an internal cross validation test using the Bootstrap procedure that assessed the model on 1000 random replacement samples drawn from our original data. Bootstrap results were compatible with those obtained with our original sample.

Outliers' effect was eliminated by testing for the Standardized residuals and the Cook's distances generated by our model, which reduced our sample to 125 cases instead of 133. Multicolineraita was also controlled by examining the correlation matrix and Standard-Errors of the Wald statistics.

As for the OLS regression model, we ensured that our model was compliant with the linearity and the normality assumptions by examining the residual plots, the distribution histograms and the *Kurtosis* and *Skewness* indicators of each of our variables. When it was possible, we transformed our variables to comply with these assumptions; otherwise, we eliminated the variable from our final model. As a result of this step, we transformed the $\Delta ROAi$ into $\text{Log} (\Delta ROAi)$ in order to attain a dependent variable with a normal distribution.

We ended with a sample of 32 successful acquirers. VIF indexes were all largely under 10, which indicate that our model is not affected by multicollinearity problems. We also, opted for the Hausman test of endogeneity by running 16 regressions to test if any of our independent variables was endogenously determined. No endogeneity effect in relation to our predictor variables was identified. The OLS prediction model was statistically significant and accounted for approximately 47% of the $\text{Log} (\Delta ROAi)$ variance.

The *Board Legitimacy* dimension was measured by the *BoardComp*, the *Qualsnp*, the *NedOwn*, and the *NedOwnValue* variables. Our results show that board legitimacy when based on the quality of the selection processes (*Qualsnp*) constitutes a significant positive predictor of acquisition success, while Board

legitimacy based on the directors' financial participation or a majority of outsider and materially independent directors are associated with a decrease in the probability of making a successful acquisitions. In relation to the *Board legitimacy* dimension, our results supported hypotheses H1, H2 and H3, while hypotheses H4, H5 and H6 were rejected.

Board Credibility was measured by the *BoardDiv*, the *BoardSpecExp* and *DirectBus* variables. Our findings show that *Board Credibility* based on the Board occupational diversity (*BoardDiv*) constitutes a significant and positive predictor of acquisition success and is positively and significantly related with the improvements of firm economic performance in the case of acquisition success.

Also, *Board Credibility* based on the higher industry specific experience of Board members relatively to the industry specific experience of the firm top managers (*BoardSpecExp*) constitutes a significant and positive predictor of acquisition success and is positively and significantly related to the improvement of firm economic performance in the case of successful acquisitions. This finding points out the importance of industry experience and knowledge of the board members and supports our hypotheses H7, H8, H9 and H10.

Board credibility when measured by the Directors' number of directorships (*DirectBus*) shows that boards with higher proportions of Busy directors (those holding more than 3 directorships at the same time) are negatively related to acquisition success, implying that the benefits of sitting on other boards is likely to be outweighed by the lack of time and involvement of busiest directors in the incumbent firm's acquisition processes, which supported our hypothesis (H11).

Board Strategic Capabilities dimension, which underlies the effectiveness of strategy processes and dialogue between the board and management, was measured by the functional distance between the CEO and the board members (*CEO-Board FuncDist*), the educational level similarity between the CEO and the Board members (*CEO-Board EducSim*), the age distance between the CEO the Board members (*CEO-Board Age dist*), the presence of a Lone founder as a leader

(*LoneFounderLead*) and the heterogeneity of directors' tenure (*Boardten*) variables. Our results show that CEO-Board functional distance, Educational level similarity and age distance are all significant and positive predictors of acquisition success, while the presence of a lone founder as a leader and the Board tenure heterogeneity were not significantly related to acquisitions success.

These results suggest that strategic dialogue and firm strategic processes could be enhanced by *Board strategic capabilities* when based on distant functional backgrounds, greater age distance, and similar educational level between the CEO and the Board members. Furthermore, Educational similarity between the CEO and the Board members is also positively and significantly related to the improvements of firm's ROA in the case of successful acquisitions. These findings supported our hypotheses H15, H16, H17 and H19, while hypotheses H18, H20 and H21 were rejected.

Board Monitoring Capabilities dimension was measured by *Auditcom*, *CompCom* and *Ownchar* variables. Although all of them were positively related to acquisition success, no one of these variables was a significant predictor of successful acquisitions. *Monitoring capabilities* measured through the *AuditCom* and the *CompCom* variables hold no significant relationship with the probability of making acquisition success. These committees, while continue to be important fiduciary mechanisms that ensure proper financial reporting and adequate compensating programs, appear to not directly contribute to the firm ability to select successful acquisitions. As for the presence on the board of a significant shareholder, including Family owners and the use of Dual shares, our results show no significant relationship of these variables with the probability of making a successful acquisition when measured by the variable factor score *OwnChar*. Hypothesis H14 was therefore accepted, while hypotheses H12 and H13 were rejected.

Finally, our results support hypothesis H22, and our findings show that in the context of strategic decision making such as in the case of M&A operations, *Board strategic* and not *monitoring capabilities* are the most important factors in predicting successful acquisitions, which should induce future research and governance

reforms to consider more seriously the strategic role of the Board of directors in creating value through an effective contribution in the firm allocation processes, specifically in the context M&A operations.

CONCLUSION

The present thesis primary objective was to investigate how corporate governance should be extended in order for boards to play a more strategic role in the firm's value creation processes, rather than sticking to a monitoring and disciplining function rooted in the traditional agency perspective. Given that board of directors, while may have some direct effect on firms' critical decisions, such as acquisitions, and only an indirect effect on firm financial performance in normal circumstances (Deutsch, 2005), this dissertation studied the role of board of directors in the area of Merger and Acquisition decisions to assess their contribution to firm performance. Our study of governance with respect to the M&A phenomenon is sensitive to the main frameworks proposed in the literature on governance, including the agency theory (Jensen and Meckling, 1976), stewardship theory (Donaldson, 1990), the Resource Dependence theory (Pfeffer and Salancik, 1978), the Resource Based View (Wernerfelt, 1984; Barney, 1991) and the Value Creating Perspective (Allaire and Firsirotu, 2003).

Through logistic and OLS regressions, we assessed how *Board Legitimacy*, *Board Credibility*, *Board Strategic and Monitoring Capabilities* predict successful acquisitions, and how they contribute to the improvements of firm post- acquisition performance.

From a theoretical perspective, the key contribution of our thesis consists in integrating the Agency theory, the demographic concepts of group dynamics drawn from the Top Management Team tradition of the Upper Echelon Theory, the Resource Based View with the four pillars of the Value Governance perspective (Allaire and Firsirotu, 1993; 2003; 2004; 2009) through the concepts of *Board*

Strategic and Monitoring capabilities to show how together *Board Legitimacy, Credibility, Strategic and Monitoring Capabilities* contribute to enhance the probability of making successful acquisitions and create economic value through M&A operations. Our findings show the great future potential for developing further the Value Creating Governance perspective as a significant theoretical frame to explain how Board of directors may contribute actively and effectively in firms' strategic decision making processes and firm economic value creation. Our findings bring, therefore, more evidence and more support to the stream of research related to the active school of board role in strategy, (Hendry and Kiel, 2004; Pearce and Zahra, 1991; Stiles and Taylor, 2001, Judge and Zeithaml, 1992, Donaldson, 1990).

From a Methodological perspective, one of the key contributions of our thesis is to introduce various original variables used for the first time in the context of governance and M&A Studies. The first of these original variables is the measure of acquisition success construct (our main dependent variable) by adopting a rigorous assessment process that starts with ensuring that the acquisition was not divested in the three to five years following the acquisition date, that no goodwill write-offs related to the acquisition under study of more than 10% were reported in the two to five following years and finally, that the average adjusted ROA post acquisition of the three years following the acquisition year is higher than the pro forma average adjusted ROA of the three years preceding the acquisition year.

To measure the quality of the selection process, we used also for the first time the *Qualsnp* variable by constructing a multidimensional score that takes in consideration various elements reflecting the nomination committee structure and practices. This measure contributes to the scarce literature that studies the effect of the nomination committee and its practices on firm performance and points out the critical role of the selection and nomination processes as a primary source of Boards and directors' legitimacy.

Another original measure is the *BoardSpecExp* which served to operationalize the *Credibility* dimension through the average degree of industry specific experiences of the board members relatively to the average experience of

the three top managers in the firm. To our knowledge, this measure is an original one and constitutes a new way of assessing the advantage or disadvantage of the critical phenomenon of *Information Asymmetry* that underpin all the agency relationships between the principals and the agents and which will remain as one of the main issues in the corporate governance field.

Finally, in terms of corporate governance practice, our findings shed light on the critical aspects of board selection and nomination processes. Having legitimate and credible directors sitting on the board starts with a clear definition of the specific needs of the firm, and these needs have to be rigorously tied to the strategic direction of the corporation, to its risks and to its opportunities in order to define the ideal mix of directors' qualifications. This exercise should not be seen as a formal fiduciary duty to add into the board checklist of routine tasks, but rather as a critical component of the firm strategic planning processes. Nomination of new board members should not be merely assimilated with fiduciary obligation, it should rather be considered as a strategic decision that aims the acquisition of valuable resources to be embedded in firm governance processes to build governance strategic capabilities that will contribute in creating sustainable economic value.

Furthermore, nomination committee with members having experiences in other firms' committees is also a differentiating attribute that would reinforce the quality of the firm's nominating practices.

As to board composition, director's independence based on the *materiality* concept as the principal aspect of directors' nomination should also be questioned. Our findings show that occupational diversity and industry specific experience of directors are more likely to add value for the board than the mere compliance with the relational materiality condition. Furthermore, our findings showed that higher functional distance between the board members and the CEO are more likely to induce dynamic and strategically active Boards.

In addition, when board members have a similar educational level as the CEO, the strategic dialogue is likely to be facilitated, while age distance between the

board and the CEO may balance the weaknesses that characterize the management style of older and younger CEOs. Finally, ensuring that directors' industry specific experience is at least equivalent or ideally superior to the average experience of the top firms' manager could also be considered as an important attribute for board credibility.

Regarding Board multiple directorships, our findings suggest that boards should rather limit the proportion of busiest directors. Indeed, while the firm could take some advantage from the access to these directors' external networks, their active contribution in the firm strategic processes remains uncertain and their negative contribution could offset the benefits obtained in terms of the access to external resources if that is the objective behind their nomination on the firm's Board of directors.

Our findings invite therefore corporate governance practitioners and legislators to reconsider the priority given to the fiduciary aspects and to shift towards a more strategic oriented reforms and practices that would enable the Board of directors' strategic capabilities and to integrate them as significant components of the firm competitive advantage.

Several limitations are associated with our research project. The first limitation of the present study is the sample size used for both the logistic and the OLS regression models. The choice to proceed with only significant acquisitions that meet all our requirements, while it may ensure the strategic character and the magnitude of the acquisitions under study, has severely limited the size of our sample which also constrained the number of variables to include in the analysis. The period of analysis could also affect our results, as acquisitions made in 2000, were not necessarily conducted in the same economic conditions as those made in the late 2006. The data collected for the period prior to 2002 were not yet affected by the Sarbanes-Oxley's reforms, which could disadvantage firms having made their acquisitions before 2002.

Finally, the study is restricted to the Canadian context and any generalisation of our findings to other institutional contexts is therefore limited.

Future research could extend the context of our study to other countries and compare how our findings are replicable in other settings such as the US, the Asian or the European contexts. The US context of M&A may offer the opportunity to select a more sizable sample, which may reduce the Type II error of rejecting exiting effects by considering them statistically insignificant.

Another limitation of our study is the composite nature of some variables, specifically those related with the *monitoring capability dimension*, such as the *CompCom* variable. Splitting this measure in several variables could capture better the variance among the sample population and could point out specific aspects that are significant but was not captured given the weaker ratings on the other items composing the aggregate score.

While ROA is widely used in strategic management research (Bettis, 1981, Hoskisson and Hitt, 1990; Chatterjee and Wernerfelt, 1991; Allaire and Firsirotu, 1993; 2004), particularly in assessing post acquisitions performance (Hoskisson and Hitt, 1990; Cosh et al, 2006) and is highly correlated with other return measures (Bettis, 1981; Barton and Gordon, 1988), it remains an accounting based indicator, which could be biased or manipulated by management. The accounting methods for acquisitions also vary from a firm to another which could also introduce some bias. Our results suggest that the initial classification based on the improvements of the ROA was not infallible. An interesting research avenue will be to complement the our conditions in relation to the absence of goodwill write-offs and divestments with other indicators such as the EVA, the free cash flows or some market based indicators, such as the abnormal returns used in the event studies to identify which of our findings will be still supported.

Another avenue for future research is the use of structural equations with survey data drawn from larger samples to measure more accurately the relationship between the latent dimensions such as *Legitimacy*, *Credibility*, *Board strategic* and

monitoring capabilities and other measurable variables such as demographic attributes (occupational, functional, educational, ...etc.) board members and managers' perceptions of their role, board dynamics and its involvement in strategic processes, directors' selection and nominating processes along with firm compensation setting practices.

While our results remain constrained by several limitations discussed above, they constitute, in our opinion, a significant contribution in the governance and strategy research as they add more evidence on the strategy role of Board of directors that goes beyond the fiduciary monitoring and disciplining functions rooted in the traditional agency perspective. The Value Creating Governance perspective when used in the context of a single strategic decision's outcome, such as the M&A context, opens the door to detect various critical relationships between the dynamic, multifaceted and strategic role of Boards and the probability of making sound strategic decisions and allows to capture better the elusive link between corporate governance and firm performance.

From an academic perspective, and as discussed previously, our thesis makes several contributions which, we believe, will establish many promising avenues for future governance research, especially for those interested in the importance of the role that boards are increasingly called to play in firm strategic decision making and their contribution to value creation and rent generation processes.

In relation to Board *Legitimacy*, our study sheds light on the critical importance of directors' selection and nomination processes and its effect on selecting successful acquisitions. Relying on the hypothesis that outside directors are more independent from management than insiders, Board composition role and effect on firm performance were extensively investigated under the agency perspective by using the outsiders/insiders proportion as a proxy for board effectiveness. The Independence of directors with regard to the CEO constitutes,

therefore, the corner stone of the fiduciary control role that board members should fulfill in order to achieve monitoring effectiveness.

Conversely, our results show that highly outsider dominated Boards are rather negatively related with the probability of making strategic critical decisions such as selecting a successful acquisition. This finding reinforces the doubt about the elusive link between outside directors (i.e. independent and effective) and firm performance as reported by many previous studies based on the agency theory prescriptions. In practice, the supposed independence of outside directors (with no material relationship with the incumbent firm) is still associated with the best governance practices and represents the foundation of many governance standards around the world.

Our results show however, that the independence concept, based solely on the *outside status of directors* and the *material relationship* rules is not, by itself, a sufficient condition for board effectiveness. What most matter according to our findings, is how directors are nominated and not their outsider or insider status. We believe therefore that firms with qualitative nomination and selection processes will enhance board legitimacy and will contribute significantly to the probability of making successful strategic decisions. Nomination and governance committees are, therefore, invited to begin their nomination processes by asking questions about whom the director represent and how he/she would fit the strategic needs of the firm, and not by considering only his/her outsider or insider status.

Consequently, Firms should ensure that their Nomination committees define and establish reliable working procedures to be used as important institutional mechanisms that improve directors' selection and independence.

On the basis of our findings, qualitative nominating processes were associated with Nominating committees composed by a majority of members sitting on other firms' nomination committees, having a clear mandate and a specific charter that describes in details the selection process, along with the existence and divulgation of an annually updated long-term plan for the composition of the board

that take into consideration the strategic direction of the corporation, its risks and its opportunities and define the ideal mix of director's qualifications. The use of external advisers in the course of a nomination process will also contribute to ensure its quality. Put together, these attributes will enhance the overall quality of the nomination and selection processes, raising therefore the level of board legitimacy and ultimately contribute to the probability of making successful strategic decisions. While our results are based on a composite index that aggregate all these dimensions, we suggest for future research, to assess them separately, in order to evaluate more accurately their relative effect on the probability of making successful acquisitions when taken individually.

While several studies pointed out the positive impact of director's shareholding or the presence on the board of a significant shareholder or the founder in the case of family controlled firms, our results show no relationship between the presence of a significant shareholder or a founder and the probability of making a successful acquisition. However, we should recall that we used score factors variables aggregating several aspects- Significant shareholder presence, family board, the use of dual shares and the presence of a lonely founder on the board- to proxy the firm ownership characteristics, given the multicollinearity problems encountered in the course of our data analysis process. We believe, however, that these attributes may play a significant role in the enhancement of board legitimacy and invite future research to consider them in other research contexts and designs with no severe multicollinearity issues.

In relation to the Board *Credibility*, our results support the proposition that boards with highly diversified occupational backgrounds are more likely to make sound strategic decisions than boards with directors having similar profiles (Cannella et al, 2008; Eisenhardt and Schoonhoven, 1990; Norburn and Birley, 1988). While several researchers from the Top Management Team (TMT) field argue that highly diversified groups may lead to higher levels of conflicts, interaction difficulties and lower levels of social integration (Hillman and Dalziel, 2003, p.497-498), we consider, as many other scholars, that heterogeneous groups will also provide broad consideration of alternatives, widespread information gathering, constructive conflicts

and effective dispute resolution (Cannella and Holcomb, 2005; Pitcher and Smith, 2001; Eisenhardt and Schoonhoven, 1990).

Indeed, in the context of critical strategic decisions, such as significant M&A operations, and particularly at the step of selecting a target, efficient generation and evaluation of alternatives are essential in making sound strategic choices (Finkelstein et al, 2009) and boards composed by directors with heterogeneous occupational backgrounds will, therefore, be able to gather more information from different internal and external contacts (Jackson, 1992) and will possess greater problem-solving skills along with the ability to mobilize multiple perspectives (Bantel and Jackson, 1989). Heterogeneous boards will also proceed with a more comprehensive evaluation of alternatives given the propensity and willingness of directors to challenge and debate each other (Gladstein, 1984; Schweiger et al, 1989) and as noted by Finckelstein et al, (2009), the decision quality may prove superior given that heterogeneous groups tend to have more analytical effectiveness (Amason, 1996; McGrath, 1984).

Furthermore, Sundaramurthy and Lewis (2003) noted that a balanced combination between control and collaboration components is needed to create self-correcting cycles that replace the self-reinforcing ones and enable trust to cohabit with constructive cognitive and task-oriented conflicts. Finally, they concluded that for this integration to be successful, governance structures should, however, encourage diversity of board members' background as well as outsider-insider mix within the boardroom, board-management formal and informal interactions (Sundaramurthy and Lewis, 2003). Considering all these arguments, we recommend for firms willing to enhance their Board credibility to ensure a certain degree of occupational background heterogeneity among their directors, which may enhance, as supported by our results, board strategic decision making outcomes.

Another interesting and original finding that contribute to Board *Credibility*, is related with the relative level of specific industry experiences between board members and firm's top Managers. Power dynamics at the top of the firm was extensively investigated in the TMT tradition (Finckelstein et al, 2009) and research

in this field highlighted the influence of power on strategic decision making processes (Finkelstein, 1992; Mintzberg, 1992; Bourgeois and Eisenhardt, 1988). According to Finkelstein (1992), *Power* comes generally from structural, prestige, ownership and expertise sources. From these sources, expertise will have the most predictive power among TMT members, which was previously assessed by matching functional experiences and strategic contingencies (Carpenter and Wade, 2002; Hambrick, 1981; Bunderson, 2003).

We could therefore argue that *Credibility*, when based on directors' expertise and knowledge about the acquirer industries and businesses, may be considered as a source of *Power* that help directors to significantly influence firm strategic decision making processes.

By comparing the degree of industry expertise and knowledge between Board members and the firm top managers (measured by our *BoardSpecExp* variable), we could infer some considerations about *Power* dynamics between Board members and firm managers, which lead us to propose that in the case of a higher relative level of industry expertise and knowledge of Executive directors, the board may exert some power in the strategic decision making processes, and contribute more positively in the selection of sound acquisitions, than boards with a lower level of industry expertise and knowledge relatively to the top managers team.

As for the *Board Strategic Capabilities*, here again we used demographic variables based on the functional and educational backgrounds of Board members relatively to the CEO, along with their respective age distance. These Board characteristics affect board vigilance and behaviour, especially in terms of its involvement in firm strategic making decisions (Finkelstein et al, 2009).

Our results show that functional distance between the Board and the CEO was significantly and positively related to the probability of selecting successful acquisitions, suggesting that beyond the diversity of occupational backgrounds among directors, the functional distance between the Board members and the CEO may prevent the negative aspects of social integration and cohesiveness, such as

the concern with conformity to norms or the propensity to preserve cordial relations ahead of any other considerations, which may limit the quality of both strategic alternatives generation and evaluation capabilities by board members (Finckelstein et al, 2009).

Furthermore, functional background similarity between Board members and the CEO may signal that the board is dominated by a powerful CEO (Westphal and Zajac, 1995) which will limit the Board members in their ability to curb and to challenge the strategic decision discretion of individual top managers (Fama and Jensen, 1983). Board-CEO functional distance will therefore enhance the capability of the Board to set and to effectively participate in the strategic dialogue and decision making processes, as directors will behave in a less cohesive way and will adopt a more challenging and independent postures.

Another interesting finding is the positive and significant effect of the similarity between the Board's and the CEO's educational level on the probability of making successful acquisitions. Previous studies on demographics in the TMT field investigated the educational background rather than the educational level distance between the Board and the CEO. Our findings suggest that educational level similarity will provide a favourable context for the board to participate in the firm strategic decision making by facilitating the discussion conditions with management about their proposals, which may contribute to the quality and depth of the strategic dialogue.

Finally, age distance between the Board and the CEO appear to be also related with the probability of making successful acquisitions. Age distance between the CEO and the Board members may act as a balancing mechanism. Thus, in the case of a young CEO, a Board with a majority of older members may steer him/her away from overly risky ventures. On the other hand, in the case of an older CEO, a relatively younger Board may urge him to consider some more risky strategic options (Westphal and Zajac, 1995), particularly in the context of a strategic acquisition.

Considering corporate governance in terms of *Board Legitimacy*, *Credibility* and *Strategic Capabilities* should shift the attention of future research and practice toward governance specific and hard to imitate resources and competencies. Indeed, governance resources and capabilities- as those provided by firm selection and nominating processes, by the fit between directors' industry specific experience and firm strategic needs, by a careful dosage of Directors' occupational and age diversity or their level of education similarity- when combined with efficient governance processes, will enhance firm's strategic governance capabilities and contribute to create sustainable competitive advantage by making the Board of directors value-creating for the company and for society at large rather than a mere agency cost reduction one, as prescribed by the fiduciary role with which it has been historically associated.

APPENDIX A
VARIABLES' DEFINITION AND SUMMARY

Table A.1
Variables' definition and summary

Variables	Definition	Description	Link with Thesis Hypotheses and research questions
Dependent			
<i>AcquSuccess</i>	<i>Acquisition success.</i> Binary	<p>An acquisition is classified as a success if three conditions are fulfilled as follows:</p> <ol style="list-style-type: none"> 1- Absence of any divestiture related to the acquisition under study during the 2 to 5 years after its completion; 2- No goodwill write-off related to the acquisition under study that exceeds 10% of the original value during the 2 to 5 years after the acquisition date; 3- All the acquisitions satisfying the criteria 1 and 2, should respect the following additional condition: <p>The 3 years Average post-acquisition Adjusted-ROA > 3 years Average pre-acquisition Adjusted-ROA</p>	<p>Hypotheses:</p> <p>H1, H2, H3, H5, H7, H9, H11, H12, H14, H15, H16, H17, H20, H21, and H22.</p> <p>Research questions:</p> <p>Q 1.1; Q 2.1; Q 3.1; Q 4.1; Q 5</p>
$\Delta ROAi$	<p><i>Improvements of ROA for successful acquirers.</i></p> <p>Improvement percentage of ROA.</p>	<p>$\Delta ROAi$ computed as follow:</p> $\Delta ROAi = \frac{ROA_{post\ i, (t+1\ to\ t+3)} - ROA_{pre\ i, (t-3\ to\ t-1)}}{ROA_{pre\ i, (t-3\ to\ t-1)}}$	<p>Hypotheses:</p> <p>H4, H6, H8, H10, H13, H18 and H19.</p> <p>Research questions:</p> <p>Q 1.2; Q 2.2; Q 3.2; Q 4.2; Q 5</p>

Independent			
<i>BoardComp</i>	<i>Board Composition.</i> Ratio	Number of board members that are independent from the management and from any significant shareholder divided by the total number of board members.	Hypothesis: H1 Research Question: Q 1.1
<i>NedOwn</i>	<i>Non executive Directors Owned Shares.</i> Ratio	Number of shares owned by all the acquirers' Non- executive directors (excluding the CEO) during the acquisition year divided by the total number of shares outstanding during the same year	Hypothesis: H2 Research Question: Q 1.1
<i>NedOwnValue</i>	<i>Relative value of the shares owned by Non Executive Directors.</i> Ratio	Monetary value of the acquirers' non-executive directors purchased and held shares divided by the total compensation they receive during the acquisitions year.	Hypothesis: H2 Research Question: Q 1.1
<i>Qualsnp</i>	<i>Quality of the selection and nomination processes:</i> A multidimensional score based on the examination of the attributes and practices of the nomination committee.	<ol style="list-style-type: none"> Existence of a nominating (or governance committee) with a clear mandate and specific charter (0 none- 1 if there is one); Existence of a clear description of the selection process (0 none- 1 depending 	Hypotheses: H3; H4 Research Question:

	Score.	<p>on the clarity and the extensiveness of the reported details related to the process);</p> <p>3. The majority of the Committee members (more than 51%) seat on other firms' nomination committees (0 when the proportion is less than 51% and 1 otherwise);</p> <p>4. Existence or divulgation of an annually updated long-term plan for the composition of the board that take into consideration the strategic direction of the corporation, its risks and its opportunities and define the ideal mix of director's qualifications (0 none- 4 (1 for each of the four characteristics));</p> <p>5. The majority of the committee members are outsiders independent directors (0 if < 51%; 1 if the proportion fall between 51% and 75% and 3 if it falls between 75% and 100%);</p> <p>6. The CEO is a member of the nominating committee (0) otherwise (1);</p> <p>7. The nominating committee use the services of external advisers (0 if there is no advisers - 1 otherwise).</p> <p>The final score equate the sum of the 7 components.</p>	Q 1.1 and Q 1.2
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<i>SignShareholder</i>	Existence of a significant shareholder. Binary	A dummy variable (1/0) that takes 1 when there is a significant shareholder controlling more than 10% of firm's voting shares and 0 otherwise.	Hypotheses: H5 and H6 Research Question: Q 1.1 and Q 1.2
<i>SignShareholderRep</i>	Significant shareholder representation on the Board of directors. Binary	A dummy variable (1/0) that takes 1 when the significant shareholder controlling more than 10% of firm's voting shares is represented on the Board and 0 otherwise	Hypotheses: H5 and H6 Research Question: Q 1.1 and Q 1.2
<i>BoardDiv</i>	Board occupational background diversity along eleven categories: CEO; other executive functions; retired CEO; other retired executive; lawyer; banker; consultant, chartered accountant (or CGA, CMA), academic, former politician and former state functionary (civil servants, other. Index	Step 1: $HI = 1 - \left(\sum_{i=1}^k \frac{n_i}{N} \right)^2$ Where: n_i = number of directors composing the professional category (i) N = number of directors composing the entire board. k = number of professional categories	Hypotheses: H7; H8 Research Question: Q 2.1 and Q 2.2

		<p>Step 2: Take the inverse of HI computed above (1/HI) and subtracting it from the highest value in the sample. Higher values of <i>BoardDiv</i> will indicate therefore a heterogeneous and well diversified board.</p>		
<i>BoardSpecExp</i>	<p><i>Board relative Industry-Specific Experience.</i></p> <p><i>Relative industry specific experience of Board Outside directors compared to the experience of the CEO and the three top managers of the acquirer under study.</i></p> <p>Index</p>	<p>Average of the number of previous managerial and Board positions held by outside directors in other firms having the same 2-digit NAIC industry code as the acquirer by the average of the number of the CEO and the three top managers' previous positions held in the focal firm and/or in other firms having the same 2-digit NAIC code as the acquirer</p>	<p>Hypotheses: H9; H10</p> <p>Research Question: Q 2.1 and Q 2.2</p>	
<i>BoardBus</i>	<p><i>Board and Directors Busyness. Measures the degree of directors' busyness through directorships held in other firms' Board.</i></p>	<p>A dichotomous indicator that takes the value of one if 50% or more of the board's outside directors are holding three or more board seats, and zero otherwise.</p>	<p>Hypothesis: H11</p> <p>Research Question: Q 2.1</p>	
<i>OverBoarded</i>	<p><i>Directors Busyness. Measures. Complementary variable that also measures the degree of directors' busyness through directorships held in other firms' Board.</i></p> <p>Ratio</p>	<p>Number of busy directors holding 5 or more board seats divided by the total board size.</p>	<p>Hypothesis: H11</p> <p>Research Question: Q 2.1</p>	

<i>DirectBus</i>	<p><i>Board and Directors Busynes.</i></p> <p>Factor score variable.</p>	<p>Factor score obtained through the factor Analysis procedure. Replace the <i>BoardBus</i> and <i>OverBoarded</i> variables to avoid multicollinearity problems.</p>	<p>Hypothesis: H11</p> <p>Research Question: Q 2.1</p>
<i>AuditCom</i>	<p><i>Audit committee resources:</i></p> <p><i>Audit committees with members having significant financial and accounting backgrounds and previous acquisition experience, developed through their participation in the boards of other firms.</i></p> <p>Ratio.</p>	<p>Measured as the number of the focal firm's audit committee members having financial, accounting and acquisition experience (The latter will be determined by examining each director's previous occupations and if he was in function when one of the firm involved made at least one acquisition) divided by the number of directors forming the entire committee.</p>	<p>Hypotheses: H12; H13</p> <p>Research Question: Q 3.1; Q 3.2 and Q 5</p>
<i>CompCom</i>	<p><i>Compensation committee resources:</i></p> <p><i>Reflects the effectiveness of the board monitoring capability through the quality of its compensation committee.</i></p> <p>Composite score.</p>	<p>Computed for each acquirer as follows:</p> <p>1- A score of 1 will be assigned if the number of directors appointed to the compensation committee during the incumbent CEO period divided by the total committee members is less than the sample median value of this measure, otherwise the score is 0.</p> <p>2- A score of 1 will be assigned if the value of the LTIP component linked to long term accounting and economic performance measures such as ROA, ROE, EVA, Sales Growth,...etc.</p>	<p>Hypothesis: H12</p> <p>Research Question: Q 3.1 and Q 5</p>

		<p>(Excluding short term bonuses, salary, stock options, restricted shares and other components based on share price performance) divided by the CEO total pay is greater than the sample median value of that measure, otherwise the score is 0;</p> <p>3- A score of 1 will be assigned if the CEO pay package of the acquiring company contains at least one of the following protection components: severance provision(s), employment agreement(s) or golden parachutes clause (s) otherwise the score is 0. If the company use at least one of the aforementioned protection components while having a score of 0 in #2 above, then the score for the present variable will be 0.</p> <p>4- A score of 3 will be assigned if the number of shares actually purchased and held by the committee members divided by the total shares actually purchased and held by the entire board members is greater than the sample median value of that measure, otherwise the score is 0;</p> <p>5- A score of 3 will be assigned if the number of committee members sitting on other firms' committees divided by the total committee members is greater than the sample median value of this measure, otherwise the score is 0;</p>
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		<p>6- A score of 1 will be assigned if the number of committee members having at least 10 years' experience as directors in general is greater than the sample median value of this measure, otherwise the score is 0.</p> <p>The final composite measure of the <i>CompCom</i> variable will be computed as the sum of the six individual scores.</p>	
<i>FamilyControl</i>	<p><i>Existence of a family controlling more than 10% of firm voting shares.</i></p> <p>Binary.</p>	<p>Dichotomous variable that takes 1 when there is a controlling family holding more than 10% of the voting shares, and 0 otherwise.</p>	<p>Hypothesis: H14</p> <p>Research Question: Q 3.1</p>
<i>DualShares</i>	<p><i>Controlling Family using dual shares.</i></p> <p>Binary</p>	<p>Dichotomous variable that takes 1 when the controlling family uses Dual Shares and 0 otherwise.</p>	<p>Hypothesis: H14</p> <p>Research Question: Q 3.1</p>
<i>FamilyBoard</i>	<p><i>Controlling Family with a representative on the board.</i></p> <p>Binary</p>	<p>Dichotomous variable that takes 1 if the controlling family has at least one of its members sitting on the company board of directors and zero otherwise.</p>	<p>Hypothesis: H14</p>

			Research Question: Q 3.1
<i>OwnChar</i>	<i>Ownership characteristics.</i> <i>Factor score variable.</i>	Factor score obtained through the factor Analysis procedure. Replaces the <i>SignShareholder</i> , <i>SignShareholderRep</i> , <i>FamilyControl</i> , <i>FamilyBoard</i> and <i>DualShares</i> variables to avoid multicollinearity problems.	Hypothesis: H14 Research Question: Q 3.1
<i>CEO-Board FuncDist</i>	<i>Functional distance between the CEO and the board of directors.</i> <i>Index.</i>	Computed as Follows: Step 1: creation of three categorical measures of functional backgrounds: (1) output functions: marketing and sales; (2) throughput functions: operations, R&D and engineering; (3) support functions: finance, accounting, primarily law, human resource and other administrative functions. A categorical measure of functional backgrounds of each director is created and coded 1 if the director had primary experience in marketing and sales, 2 if the director had primary experience in operations, R&D or engineering and 3 if the director primary experience is in finance, accounting, law, human resources or other administrative functions. When a director has	Hypotheses: H15; 18 Research Question: Q 4.1; Q 4.2 and Q 5

		<p>experience in two functions falling in different categories, he was classified in the one in which he had the most experience. The same procedure is applied to the CEO of each acquirer;</p> <p>Step 2:</p> <p>Create a dichotomous measure for each (Director-CEO) dyad based on the coding realized in the previous step. Thus, functional background similarity between a director and the CEO, (<i>CEO-Director functional similarity</i>), was coded 1 if the director and the CEO had experience in the same functional area defined above and 0 otherwise.</p> <p>Step 3:</p> <p>Compute the functional background similarity between the CEO and the whole board of directors (<i>CEO-Board functional similarity</i>), as follow:</p> <p>(1) for each category of the functional background i (i= Output, throughput or support functions), a proportion of (CEO-Director) dyads sharing the ith category will be determined (i.e P_{fbi} ($CEO-Dir$)=\sum (CEO-Director) dyads sharing the ith Category)/total of dyads);</p> <p>(2) a heterogeneity index similar to the Herfindhal measure will be computed as follow:</p>	
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CEO-Board Educational level Similarity		<p>CEO-Board functional Similarity index = $\sum (Pfbf)^2$</p> <p>Step 4:</p> <p>Compute the CEO-Board Functional distance variable, to be used in the empirical models, which was obtained by subtracting the (CEO-Board) functional similarity computed in the previous step from the highest value in the sample.</p>	
CEO-Board Educational level Similarity	Educational similarity between the CEO and the board of directors. Index.	<p>Step 1:</p> <p>Define a categorical measures coded as (1), when the director has less than a bachelor's degree; (2) if he has less than a master degree; (3) if he has less than a doctoral degree and (4) if he owns a doctoral degree. A similar measure will be created for each acquirer's CEO.</p> <p>Step 2:</p> <p>Create a dichotomous measure for each (Director-CEO) dyad based on the coding realized in the previous step. Thus, educational background similarity between a director and the CEO, (CEO-Director) educational similarity, was coded 1 if the director and the CEO share the same educational level defined above and 0 otherwise.</p> <p>Step 3:</p> <p>(1) for each category of the educational level</p>	<p>Hypotheses:</p> <p>H16, H19</p> <p>Research Question:</p> <p>Q 4.1; Q 4.2 and Q 5</p>

		<p>i, a proportion of (CEO-Director) dyads sharing the ith category will be determined (i.e. $Pebi$ (CEO-Dir) = \sum (CEO-Director) dyads sharing the ith Category) / total of dyads);</p> <p>(2) a heterogeneity index similar to the Herfindhal measure will be computed as follow:</p> <p>CEO-Board educational Similarity index = $\sum (Pebi)^2$</p> <p>Where:</p> <p>$Pebi$ = the proportion of CEO-Board dyads sharing the same educational level</p> <p>i = less than a bachelor degree, less than a master degree, less than a doctoral degree or a doctoral degree.</p>		<p>Hypothesis:</p> <p>H20</p> <p>Research Question:</p> <p>Q 4.1</p>
LoneFounder	<p>The founder sits on the Board of a firm but no one of his relatives are involved in the firm top management or as board members.</p> <p>Binary.</p>	<p>Dichotomous variable that takes the value of one when the founder sits on the board of the family firm and in which no one of his relatives are involved in the firm top management or as board members and zero otherwise</p>		<p>Hypothesis:</p>
LoneFounderChair	<p>The founder sits on the Board, he is not a</p>	<p>Dichotomous variable that takes the value of one</p>		<p>Hypothesis:</p>

	chairman of the firm and no one of his relatives is involved in the firm top management or as a board member.	when the founder sits on the board of the firm, he is not a chairman and in which no one of his relatives is involved in the firm top management or as a board member and zero otherwise.	H20 Research Question: Q 4.1
LoneFounderLead	Lone Founder Leadership. Factor Score variable.	Factor score obtained through the factor Analysis procedure replaces the LoneFounder, and LoneFounderChair variables to avoid multicollinearity problems.	Hypothesis: H20 Research Question: Q 4.1
Boardten	Board Heterogeneity Tenure. Coefficient of variation.	Measured by the coefficient of variation (standard deviation divided by the mean) of the number of years served by the non-executive board members (Johnson et al, 1993), which could be formulated as follow: $Boardten = (\sigma \text{ of board tenure} / \text{board tenure mean})$	Hypothesis: H21 Research Question: Q 4.1
Control Variables			
PremiumPaid	Premium Paid for the acquisition under study. Ratio.	Computed as the price actually paid by the acquirer minus the target's pre-announcement market value (30 days before the announcement date) divided by the target's pre-announcement market value (30 days before the announcement date).	Control variable

A-T Relatedness	Degree of Relatedness between the Acquirer and the target. Continuous score.	Computed as follow: Step 1: For acquirers and targets having multiple 4-digits SIC codes, we will classify the main SIC codes in which they operate according to sales importance in every business segment. Step 2: Compare the six principal 4 digit SIC codes of the acquirer and the target, and assign 0 if no 4 digit SIC primary codes matched between the acquirer and the target during the year of acquisition; 1 if at least one primary 4 digit SIC codes matches. Step 3: For those that share at least one primary 4 digit SIC code, a weight will be assigned for other matches than the primary one, as follow: 1 if 2 digits SIC are shared, 2 if 3-digit SIC are shared, 3 if 4-digit SIC are shared. Finally, the primary matches will be weighted as follow: 2 when 2-digits primary SIC codes are shared, 4, when 3-digits are shared and 6 when the 4-digits are shared.	Control variable
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<i>Tobin's q Gap</i>	<i>Tobin's q gap between the acquirer and the target.</i>	<p>To measure this indicator we used the following:</p> $\text{Tobin's } q \text{ Gap} = \frac{\text{Acquirer Tobin's } q}{\text{Target Tobin's } q}$ <p>Where:</p> <p><i>Tobin's q = [Market Value of equity + market value of long term debt] / [Book value of equity + book value of long term debt]*</i></p> <p><i>*Note: when no market value of debt is available, the book value of long-term debt is used in both numerator and denominator.</i></p>	Control variable
<i>AcquSize</i>	<i>Acquirer's relative size.</i> Ratio.	Measured as the target's assets divided by the acquirer's assets at the acquisition date.	Control variable
<i>PaymentMode</i>	<i>Acquisition's Mode of payment</i> Ratio	Computed as the fraction of the price paid by the acquirer in form of common stocks.	Control variable

APPENDIX B
VARIABLES' CORRELATIONS MATRIX

Table B.1
Correlations' Matrix

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1- AcquSuccess	1													
2- Boardcomp	-,040	1												
3- NedOwn	-,080	,159	1											
4- NedOwn%	-,250**	,151	,314**	1										
5- Qualsnp	,224**	,291**	-,095	-,217*	1									
6- SignShareholder	-,055	,042	,216*	,035	-,091	1								
7- SignShareholderRep	-,036	,069	,257**	-,009	-,045	,834**	1							
8- BoardDiv	,198*	,123	,031	-,130	,205*	-,030	,104	1						
9- BoardCollExp	-,075	-,105	,076	,094	-,102	,170	,147	-,073	1					
10- BoardSpecExp	,147	,043	-,023	,000	-,100	-,090	-,146	-,066	-,021	1				
11- BoardBus	-,022	,057	-,011	-,088	,070	-,045	,074	,132	-,347**	,112	1			
12- OverBoarded	,021	,079	-,042	-,017	,255**	-,038	-,053	,126	-,124	,228**	,521**	1		
13- Auditcom	,033	-,028	,112	-,023	-,028	,036	,139	,091	-,196*	,120	,213*	,152	1	
14- CompCom	,110	,025	-,056	,037	,040	-,085	-,120	,053	,025	,207*	,121	,140	,013	1
15- FamilyControl	-,121	,073	,310**	,248**	-,225**	,639**	,761**	,102	,091	-,219*	,057	-,139	,077	-,225**
16- DualShare	-,038	-,083	,155	,052	-,145	,357**	,444**	,049	-,008	-,182*	,172*	-,047	,095	-,200*
17- FamilyBoard	-,097	,066	,317**	,231**	-,228**	,646**	,763**	,095	,054	-,210*	,052	-,162	,085	-,237**
18- LoneFounder	-,129	-,188*	,068	,065	-,207*	,035	-,061	-,093	,131	,156	,004	-,008	-,025	-,162
19- LoneFounderChair	-,082	-,066	,023	-,058	-,079	-,008	,002	-,031	,012	,055	,186*	,122	,107	-,207*
20- Boardten	-,029	,107	-,054	,002	,012	,113	,131	,045	,071	-,091	-,059	-,079	-,093	,005
21- Premium-Paid	,005	-,114	-,035	,036	,063	-,030	-,054	-,095	,141	,060	-,095	-,158	-,015	,038
22- A-T Relatedness	,132	,051	,046	-,174*	,079	-,112	-,036	,087	-,043	,058	,028	,136	,195*	,034

23-Tobin'sQ-Gap	-,178*	-,190*	-,015	,048	-,114	,007	,025	-,140	-,031	-,056	,047	,037	,148	-,147
24-AcquSize	-,117	-,187*	-,052	,148	-,123	-,146	-,132	-,245**	-,006	,007	-,156	-,082	-,002	-,100
25-PaymentMode	-,051	-,109	-,118	-,149	,040	-,030	-,002	-,010	,011	,006	,067	,158	-,008	-,001
26-FuncdisT	,002	-,076	,072	-,009	-,141	,083	,028	-,072	,175*	-,127	-,048	-,088	-,003	-,054
27-EducSim	,096	,050	,174*	-,048	,041	,083	,041	-,182*	,108	-,095	,124	,089	-,137	-,058
28-Age distance	,085	,014	,034	-,059	-,037	-,106	-,054	,016	-,093	-,040	,008	-,109	-,132	-,139

** Significant at 0.01 (Two tailed)

* Significant at 0.05 (Two tailed)

Correlations Matrix (Continued)

	15	16	17	18	19	20	21	22	23	24	25	26	27	28
1-AcquSuccess	-,121	-,038	-,097	-,129**	-,082**	-,029	,005	,132*	-,178	-,117	-,051	,002	,096	,085
2-BoardComp	,073	-,083	,066	-,188	-,066**	,107	-,114	,051	-,190	-,187	-,109	-,076	,050	,014
3-NedOwn	,310	,155	,317	,068**	,023	-,054*	-,035**	,046	-,015	-,052	-,118	,072	,174	,034
4-NedOwn%	,248**	,052	,231**	,065	-,058*	,002	,036	-,174	,048	,148	-,149	-,009	-,048	-,059
5-Qualsnp	-,225**	-,145**	-,228	-,207*	-,079	,012	,063	,079*	-,114	-,123	,040	-,141	,041**	-,037
6-SignShareholder	,639	,357	,646*	,035	-,008	,113	-,030**	-,112	,007	-,146	-,030	,083	,083	-,106
7-SignShareholderRep	,761	,444	,763**	-,061	,002	,131**	-,054	-,036	,025	-,132	-,002	,028	,041	-,054
8-BoardDiv	,102*	,049	,095	-,093	-,031*	,045	-,095	,087	-,140	-,245	-,010*	-,072	-,182	,016
9-BoardCollExp	,091	-,008	,054	,131	,012	,071	,141	-,043	-,031	-,006	,011	,175**	,108	-,093*
10-BoardSpecExp	-,219	-,182	-,210	,156	,055	-,091	,060	,058	-,056	,007	,006	-,127	-,095**	-,040
11-BoardBus	,057	,172	,052	,004	,186	-,059	-,095	,028	,047**	-,156	,067	-,048	,124**	,008*
12-OverBoarded	-,139	-,047	-,162	-,008	,122**	-,079	-,158	,136	,037	-,082**	,158**	-,088**	,089	-,109
13-Auditcom	,077	,095	,085	-,025	,107	-,093	-,015	,195	,148*	-,002	-,008	-,003*	-,137	-,132

14-CompCom	-.225	-.200	-.237	-.162	-.207	.005	.038	.034	-.147	-.100*	-.001	-.054	-.058	-.139
15-FamilyControl	1													
16-DualShare	.569	1												
17-FamilyBoard	.970	.587	1											
18-LoneFounder	-.018	-.033*	-.013	1										
19-LoneFounderChair	-.009	.056	-.012	.773	1									
20-Boardten	.131	.011	.133	-.088	-.033	1								
21-PremiumPaid	-.012	.040	-.024	.011	.056	.013	1							
22-A-T Relatedness	-.150	-.165	-.155	.006*	.087	-.147	-.038	1						
23-Tobin'sQ-Gap	.064*	.051*	.081	.194	.126	.037	-.002	-.013	1					
24-AcquSize	-.053	-.226*	-.036	.075	-.108	-.085	-.179	.075**	.378	1				
25-PaymentMode	-.119	-.114	-.075	.224	.213	-.102	-.160	.140	.139	.265	1			
26-FuncDist	-.009	.057	.014	.106	.180	.097	-.011	-.049	.147*	.001	.056	1		
27-EducSim	.034	.007	.000*	.007	-.017	.042	.077	-.135*	-.159	-.124	-.003	.049	1	
28-Age distance	-.046	.016	-.038	-.075	-.017	-.052	.011	.118	-.040	-.022	-.012	-.057	.038	1

**Significant at 0.01 (Two tailed)

*Significant at 0.05 (Two tailed)

BIBLIOGRAPHY

- Adams, R. B and H. Mehran, 2003. Is Corporate Governance Different for Bank Holding Companies? *Economic Policy Review*, 9 (1), pp.123-142.
- Adner, R. and Helfat, C. E. 2003. Corporate Effects and Dynamic Managerial Capabilities. *Strategic Management Journal*, 24, pp 1011-1025.
- Aggarwal, R., Samwick, A. 2006. Empire-builders and shirkers: investment, firm performance, and managerial incentives. *Journal of Corporate Finance*, 12, pp 489–515.
- Aggarwal, R., Samwick, A., 1999. Executive compensation, strategic competition, and relative performance evaluation: theory and evidence. *Journal of Finance*, 54, pp 1999–2043.
- Agrawal A, Jaffe J, Mandelker G. 1992. The post-merger performance of acquiring firms: a re-examination of an anomaly. *Journal of Finance*, 47, pp 1605–1621.
- Agrawal, A. and Chadha, S. 2005. Corporate Governance and Accounting Scandals. *Journal of Law and Economics*, 48(2), pp 371-406.
- Agrawal, A. and Knoeber C., 1996. Firm Performance and Mechanisms to Control Agency Problems between Managers and Shareholders. *The Journal of Financial and Quantitative Analysis*, 31(3), pp 377-397.
- Agrawal, A., and Knoeber, C. R. 1998. Managerial compensation and the threat of takeover. *Journal of Financial Economics*, 47(2), pp 219–239.
- Alchian, A. A. et Demsetz, H., 1972, Production, Information costs and economic organization, *The American Economic Review*, 62 (5), pp 777-795.
- Alexander, G. J., Benson, P. G., and Kampmeyer, J. M. 1984. Investigating the valuation effects of announcements of voluntary corporate selloffs. *Journal of Finance*, June, pp 503–517.
- Alexander, J.C. 1995. *Fin de siècle Social Theory: Relativism, Reductionnism and the Problem of Reason*, London, Verso.
- Allaire Y. and Firsirotu, M. E. 2007. À qui appartient l'entreprise? In Allaire Y. 2008. *Propos de gouvernance...et autres*. Publication de l'Institut sur la gouvernance d'organisations privées et publiques. Édition de Presse Forstat International, Montréal, QC.

Allaire, Y. 2003. Salvaging Stock Options. In Allaire, Y. and Firsirotu, M.E, 2005. *Beyond Monks and Minow: From Fiduciary to Value Creating Governance* (Series on Governance and Strategy). Forstrat International Press.

Allaire, Y. 2003a. Fair Wages for an Honest Day's Work: The Value-Linked Units for Management Compensation. In Allaire, Y. and Firsirotu, M.E, 2005. *Beyond Monks and Minow: From Fiduciary to Value Creating Governance* (Series on Governance and Strategy). Forstrat International Press.

Allaire, Y. 2008, The independence of board members: A quest for legitimacy, *Policy Paper #3*, Institute for Governance of Private and Public Organizations (IGOPP)-Montreal.

Allaire, Y. And Firsirotu, M. E., 2001, *What's This M&A Game all about anyway? Lessons From the 1990's*. Bombardier Chair, UQAM, Working Paper.

Allaire, Y. And Firsirotu, M., 2009. *Black Markets and Business Blues: The Man-made Crisis of 2007-2009 and the Road to a New Capitalism*. FI Press. Montreal.

Allaire, Y. and Firsirotu, M.E, 1993. *L'entreprise stratégique : Penser la stratégie*. Gaetan Morin Editeur, Montréal.

Allaire, Y. and Firsirotu, M.E, 2003. Changing the Nature of Governance to Create Value. *C.D Howe Institute*, 189, November.

Allaire, Y. and Firsirotu, M.E, 2004. *Stratégies et moteurs de Performance : les défis et les rouages du leadership stratégique*. Chenelière- McGraw Hill.

Allaire, Y. and Firsirotu. E. M. 1990, Strategic Plans as contracts, *Long Range Planning*, 23(1).

Allaire, Y., 2006. Dual-class Share structures in Canada: Some modest proposals. *The Institute for Governance of Private and Public Organizations*. Available online at <http://ssrn.com/abstract=952043>.

Allaire, Y., 2008. The Independence of Board Members: A Quest for Legitimacy. Policy Paper # 3, Institute for Governance of Private and Public Organizations (IGPPO)-Montreal.

Allaire, Y. 1984, De la méthode analytique à la pratique ou le Savant et le Manager: essai sur l'épistémologie de la recherche en gestion. Dans Actes du Colloque : Perspectives de recherche pour le praticien, septembre 1984.

Allen, M.P., 1981. Managerial Power and Tenure in the Large Corporation. *Social Forces*, 60, pp. 482-494.

- Amason, A., 1996. Distinguishing the effects of functional and dysfunctional conflict on strategic decision making: resolving a paradox for top management teams. *Academy of Management Journal*, 39 (1), 123–148.
- Amihud, Y., and Lev, B. 1981. Risk reduction as a managerial motive for conglomerate mergers. *Bell Journal of Economics*, 12, pp 605-617.
- Amit, R., & Schoemaker, P. J. 1993. Strategic assets and organizational rent. *Strategic Management Journal*, 14, pp 33–46.
- Anand J, Singh H. 1997. Asset redeployment, acquisitions and corporate strategy in declining industries. *Strategic Management Journal*, Summer Special Issue, 18, pp 99–118.
- Anderson R.C. and D.M. Reeb, 2003. Founding-Family Ownership and Firm Performance: Evidence from the S&P 500. *Journal of Finance*, 58, pp. 1301–29.
- Anderson, C. W., Becher, D. A., Campbell, I. and Terry L., 2004. Bank Mergers, the Market for Bank CEOs, and Managerial Incentives. *Journal of Financial Intermediation*, 13, pp 6–27.
- Anderson, D. W., Melanson, D. and Maly, J. 2007. The Evolution of Corporate Governance: Power redistribution brings boards to life. *Corporate Governance: An International Review*, 15(5), pp 780-797.
- Anderson, R. C. and Bizjak, J. M. 2003. An empirical examination of the role of the CEO and the compensation committee in structuring executive pay. *Journal of Banking and Finance*, 27 (7), pp.1323–48.
- Anderson, R. C. and Reeb. D. M., 2004. Board Composition: Balancing Family Influence in S&P 500 firms. *Administrative Science Quarterly*, 49, pp. 209-237.
- Andrade, G., Mitchell, M., and Stafford, E., 2001. New evidence and perspectives on mergers. *Journal of Economic Perspectives*, 15, pp. 103–120.
- André, P. Ben-Aamar, W. And Saadi, S. 2006. Corporate Governance and Shareholder Wealth: Evidence from Acquisitions of New Economy Firms in Canada. Working Paper # 06-33. School of Management, Ottawa of Ottawa.
- Andrew Kitching Law and Government Division, 2008, Director's Liability Under the Canada Business Corporation Act, *Parliamentary Information and Research Service, Library of Parliament, PRB 08-25E*.
- Andrews, K. R. 1971. *Concept of Corporate Strategy*. Dow Jones Irwin.
- Andrews, K. R., Learned, E., Christensen, C. R. and Guth, W. 1965. *Business policy: text and cases*. Homewood, Irwin.

- Andrews, K.R. 1987. *The Concept of Corporate Strategy*. Homewood, Illinois: Irwin.
- Anslinger, P.L., & Copeland, T.E. 1996. Growth through acquisitions: A fresh look, *Harvard Business Review*, January-February.
- Ansoff, H. I. 1965. *Corporate strategy*. New York: McGraw Hill.
- Ansoff, I. 1968. *Corporate Strategy*. Harmondsworth: Penguin.
- Argyris, C. 1964. *Integrating the Individual and the Organization*. New York: Wiley.
- Arrow, K., 1985, *The Economics of Agency*, in J.W. Pratt and R.J Zeckhauser, eds., *Principals and Agents: The Structure of Business*, Boston: Harvard Business School Press.
- Asquith, P., 1983, Merger bids, uncertainty, and stockholder returns, *Journal of Financial Economics* 11, pp 51-83.
- Avery, C., Chevalier, J. A. and S. Schaefer, S., 1998. Why Do Managers Undertake Acquisitions? An Analysis of Internal and External Rewards for Acquisitiveness. *Journal of Law, Economics and Organizations*, 14, pp. 24-43.
- Bacon, J. 1985. The role of outside directors in major acquisitions or sales. *The Conference Board Research Bulletin*, No. 180.
- Bailey, E. E. And Helfat, C. E. 2003. External Management Succession, Human Capital and Firm Performance: An Integrative Analysis. *Managerial and Decision Economics*, 24(4), pp. 347-369.
- Bain, J. S. 1956. *Barriers to new competition*. Cambridge: Harvard University Press.
- Bain, J. S. 1968. *Industrial organization* (2nd ed.). New York: Wiley.
- Baker, G.P., Jensen, M.C. and Murphy, K.J. 1988. Compensation and incentives: practice vs theory. *Journal of Finance* 43, pp 593-616.
- Bantel, K. A., & Jackson, S. E. 1989. Top management and innovations in banking: Does the composition of the top team make a difference? *Strategic Management Journal*, 10: 107-124.
- Barber, Brad M. and John L. Lyon .1996. Detecting abnormal operating performance: The empirical and power specification of test statistics. *Journal of Financial Economics*, 41, pp. 359-399.
- Barney, J. B. 1986. Strategic factor markets: Expectations, luck, and business strategy. *Management Science*, 42, pp 1231-1241.

Barney, J. B. 1991. Firm Resources and Sustained Competitive Advantage. *Journal of Management*, 17, 1, pp 99-120.

Barney, J. B. 2001. Is the resource-based "view" a useful perspective for strategic management research? Yes. *Academy of Management Review*, 26, pp 41-56.

Barney, J. B., 1988. Returns to Bidding firms in Mergers and Acquisitions: Reconsidering the Relatedness Hypothesis. *Strategic Management Journal*, 9, pp.71-78.

Barney, J., Wright, M. and Ketchen, D. 2001. The RBV of the firm: ten years after 1991. *Journal of Management*, 27, pp. 625-41.

Baron, R.E., Kenny, D. A., 1986. The moderator-mediator variable distinction in social psychological research: conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51, pp 1173-1182.

Barontini, R. And Caprio, L. 2006. The Effect of Family Control on Firm Value and Performance: Evidence from Continental Europe. *European Financial Management*, 12(5), pp. 689-723.

Barton, S.L. and Gordon, P.J. 1988. Corporate Strategy and Capital Structure. *Strategic Management Journal*, Vol. 9, pp. 623- 632.

Baskin, B., Miranti, P. J, and Miranti, P. J. Jr.1997. *A History of Corporate Finance*. Cambridge University Press.

Baysinger, B. D. and Zardkoohi, A. 1986. Technology, Residual Claimants and Corporate Control. *Journal of Law, Economics and Organizations*, 2(2), pp 339-349.

Baysinger, B.D. and Hoskisson, R.E, 1990. The composition of boards of directors and strategic control: Effect on corporate strategy. *Academy of management Review*, 15, pp 72-81.

Baysinger, B.D., & Hoskinson, R.E. 1990. The composition of the board of directors and strategic control: Effects of corporate strategy. *Academy of Management Review*, 15, pp 72-87.

Beatty, R. P., & Zajac, E. J. 1994. Managerial incentives, monitoring, and risk bearing: A study of executive compensation, ownership, and board structure in initial public offerings. *Administrative Science Quarterly*, 39(2), pp 313-335.

Bebchuk, L. A. and Fried, J. 2004. *Pay without Performance: The Unfulfilled Promise of Executive Compensation*. Harvard University Press, Cambridge, MA.

Bebchuk, L. A., Coates IV, J. C. and Subramanian, G. 2002, The powerful antitakeover force of staggered boards: Theory, evidence, and policy. *Stanford Law Review* 54, pp 887-952.

- Bebchuk, L., & Fried, J. 2006. Pay without performance: Overview of the issues. *Academy of Management Perspectives*, 20(1), pp. 18–24.
- Bebchuk, L., Cohen, L. A. and Ferrell, A. 2004. What matters in corporate governance? *Harvard Law & Economics, Discussion Paper No. 491* (November).
- Bebchuk, L., R. Kraakman and G. Triantis, 2000. Stock Pyramids, Cross-Ownership and Dual Class Equity: The Mechanisms and Agency Costs of Separating Control from Cash flow Rights (in R. Morck, ed.), *Concentrated Corporate Ownership*, NBER, pp. 295–315.
- Beckman, C. M., & Haunschild, P. R. 2002. Network learning - the effects of partners' heterogeneity of experience on corporate acquisitions. *Administrative Science Quarterly* 47, 1, pp 92-124.
- Ben Amar, W. and Andre, P., 2006. Separation of Ownership from Control and Acquiring Firm Performance: The Case of Family Ownership in Canada. *Journal of Business Finance & Accounting*, 33(3) & (4), pp 517–543.
- Berger PG, Ofek E. 1995. Diversification's effect on firm value. *Journal of Financial Economics*, 37, pp 39–65.
- Berger, P. G. and Ofek, E. 1996. Bustup Takeovers of Value-Destroying diversified firms. *Journal Of Finance*, 51, pp 1175-1200.
- Bergh, D. D. 1997. Predicting divestiture of unrelated acquisitions: an integrative model of *ex ante* conditions. *Strategic Management Journal*, 18, pp 715–732.
- Berkovitch, E. and Narayanan, M. P., 1993. Motives for Takeovers: An Empirical Investigation. *Journal of Financial and Quantitative Analysis*, 28, 3, pp 347-362.
- Berle, A. A., Jr., and Means, G. C., 1932, *The Modern Corporation and Private Property*. New York, MacMillan.
- Bettis, R. 1981. Performance differences in related and unrelated diversified firms. *Strategic Management Journal*, 2, pp. 379–393.
- Bhagat, S. And Black, B. 2002, The Non-Correlation between Board Independence and long-term firm performance. *The Journal of Corporation Law*, Vol. 27, pp. 231-273.
- Bhagat, S., Black, B. 1997. The uncertain relationship between board composition and firm performance, *Working paper, Columbia Law School, New York, NY*.
- Bhagat, S., Carey D. C., and Elson, C.M. 1999. Director Ownership, Corporate Performance and Mangement Turnover. *The Business Lawyer*, 54, pp 885-919.

- Blau, P.M., 1977, *Inequality and Heterogeneity: A Primitive Theory of Social Structure*. New York: Free Press.
- Bluedorn, A. C., Johnson, R. A., Cartwright, D. K., and Barringer, B. R. 1994. The interface and convergence of the strategic management and organizational environment domains. *Journal of Management*, 20, pp 201-262.
- Blyler, M. and Coff, R. W. 2003. Dynamic capabilities, social capital, and rent appropriation: ties that split pies. *Strategic Management Journal*, 24, 7, pp 677-86.
- Bodolica, V. And Spraggon, M. The Implementation of Special Attributes of CEO Compensation Contracts Around M&A Transactions. *Strategic Management Journal*, 30, pp. 985-1011.
- Boeker, W. 1992. Power and managerial dismissal: Scapegoating at the top. *Administrative Science Quarterly*, 37, pp 400-421.
- Boot, A. W. A. 1992. Why hang onto losers? *Divestitures and takeovers*. *Journal of Finance*, XLVII, pp 1401-1423.
- Bothwell, J. L. 1980. Profitability, risk and the separation of ownership from control. *Journal of industrial Economics*, 28(3), pp 303-311.
- Bourgeois, L. J. III, & Eisenhardt, K. M. 1988. Strategic decision processes in high velocity environments: Four cases in the microcomputer industry. *Management Science*, 34: 816-835.
- Bouzinab, K. 2005. Board of Directors: Strategic Processes and Changing Role. Paper Presented at the 25th Annual International Conference of the Strategic Management Society. Orlando, FL.
- Bouzinab, K. 2006. Gouvernance d'entreprise, processus stratégiques et avantage distinctifs: Comment transformer les pratiques de gouvernance en capacités dynamiques? Bombardier Chair in transnational management- School of Business (ESG), University of Quebec at Montreal (UQAM).
- Bowen, H.P. and Wiersema, M. F. 2004. Modeling Limited Dependent Variables: Methods and Guidelines for Researchers in Strategic Management, In Ketchen, D. J. and Bergh, D. Editors, 2004. *Research and Methodology in Strategy and Management*, Volume 1, pp. 87-134. Elsevier Ltd.
- Boyd, B. K. 1994. Board Control and CEO Compensation. *Strategic Management Journal*, 15, pp 335-344.
- Boyd, B. K. 1994. Board Control and CEO Compensation. *Strategic Management Journal*, 15, pp 335-344.

- Boyd, Richard N. 1984. *The Current Status of Scientific Realism*, in *Scientific Realism*, ed. J. Leplin, 41-82. Berkeley: University of California Press.
- Boyle, W., Carter, R., and Stover, R., 1998. Extraordinary antitakeover provisions and insider ownership structure: the case of converting saving and loans. *Journal of Financial and Quantitative Analysis*, 33, pp 291-304.
- Bradley, M., Anand D., and E. Han K. 1983. Synergistic gains from corporate acquisitions and their division between the stockholders of target and acquiring firms, *Journal of Financial Economics*, 21, pp 3-40.
- Bradley, M., Desai, A., and E.H. Kim. E. H., 1988. Synergistic Gains from Corporate Acquisitions and Their Division between the Stockholders of Target and Acquiring Firms. *Journal of Financial Economics*, 21(1), pp 3-40.
- Braiotta, L., Jr., & Sommer, A. A., Jr. 1987. *The essential guide to effective corporate board committees*. Englewood Cliffs, NJ: Prentice-Hall.
- Brickley, J., Lease, R. and Smith Jr., C. 1994. Corporate Voting: Evidence from Charter Amendment Proposals. *Journal of Corporate Finance*, 1, pp 5-31.
- Bruton, G. D., Oviatt, B. M., and White, M. 1994. Performance of acquisitions of distressed firms, *Academy of Management Journal*, 37, pp 972-989.
- Buck, T., Bruce, A. C., Main, B. G. and Udueni, H. 2003. Long Term Incentive Plans, Executive Pay, and UK Company Performance. *Journal of Management Studies*, 40, pp. 1709-1727.
- Bunderson, J.S. 2003. Team member functional background and involvement in management teams: Direct effects and the moderating role of power centralization. *Academy of Management Journal*, 46(4): 458-474.
- Burgelman, R. A. 1983. A Process Model of Internal Corporate Venturing in the Diversified Major Firm. *Administrative Science Quarterly*, 28, pp 223-244.
- Burkart, M. 1995. Initial Shareholdings and Overbidding in Takeover Contests. *Journal of Finance*, 50, pp 1491-1515.
- Burns, N. And Kedia, S. 2006. The impact of performance-based compensation on misreporting. *Journal of Financial Economics*, 79(1), pp. 35-67.
- Byrd, J.W. and Hickman, K. A., 1992. Do Outside Directors Monitor Managers? Evidence from Tender Offers Bids. *Journal of Financial Economics*, 32, pp 195-221.
- Byrne, D., Clore, G. L., and Worchel, P. 1966. The effect of economic similarity-dissimilarity as determinants of attraction. *Journal of Personality and Social Psychology*, 4, pp 220-224.

Campa J.M., Kedia S. 2002. Explaining the diversification discount. *Journal of Finance*, 56, pp 1731-1762.

Canella, A.A., Park, J.H, Lee, H.K, 2008, Top Management Team Functional Background Diversity and Firm Performance: Examining The Roles of Team Member Colocation and Environmental Uncertainty. *Academy of Management Journal*, Vol. 51(4), pp- 768-784.

Cannella, A. and Hambrick, D.C. 1993. Effects of executive departures on the performance of acquired organizations. *Strategic Management Journal*, 14, pp 137-152.

Cannella, A., Fraser, D. and Lee, D. 1995. Firm Failure and Managerial Labour Markets: Evidence from Texas Banking. *Journal of Financial Economics*, 38, pp185-210.

Cannella, Albert A. Jr. and Tim R. Holcomb. 2005. A multilevel analysis of the upper echelons model. In Alfred Dansereau and Francis J. Yammarino (Eds.), *Multilevel issues in strategy and methods (Research in Multi-Level Issues, Vol. 4. Oxford, UK: Elsevier Science.*

Capron L, Mitchell W. 1998. Bilateral resource redeployment following horizontal acquisitions: a multi-dimensional study of business reconfiguration. *Industry and Corporate Change*, 7, pp 453-484.

Capron, L. and Anand, J.J. 2007. Acquisition-Based Dynamic Capabilities. Chapter 6 in Helfat, C., Finkelstein, S., Mitchell, W., Peteraf, M., Singh, H., Teece, D. and Winter, S., (Ed) 2007. *Dynamic Capabilities: Understanding Strategic Change in Organisations*. Blackwell Publishing, Malden.

Capron, L., Dussauge, P. and Mitchell, W. 1998. Resource Redeployment following Horizontal Acquisitions in Europe and North America, 1988-1992. *Strategic Management Journal*, 19, 7, pp 631-661.

Carney, M. 2005. Corporate Governance and Competitive Advantage in Family-Controlled Firms. *ETP, Baylor University, May 2005*, pp. 249-265.

Carpenter, M. A., and Sanders, W. G. 2004. The effects of top management team pay and firm internationalization on MNC performance. *Journal of Management*, 30, pp 509-528.

Carpenter, M. A., and Westphal, J. D. 2001. The strategic context of external network ties: Examining the impact of director appointments on board involvement in strategic decision making. *Academy of Management Journal*, 44, pp 639-660.

Carpenter, M. And Sanders, W. M. 2002. Top Management Team Compensation: The missing link between CEO pay and firm performance. *Strategic Management Journal*, 23, pp 367-375.

- Carpenter, M.A., 2002. The Implications of Strategy and Social Context for the Relationship between Top Management Team Heterogeneity and Firm Performance. *Strategic Management Journal*, 23, pp 275–284.
- Carpenter, M. A., & Wade, J. B. 2002. Micro-level opportunity structures as determinants of non-CEO executive pay. *Academy of Management Journal*, 45: 1085–1103.
- Carter C.B., Lorsch J.W. 2004. *Back to the Drawing Board: Designing Corporate Boards for a Complex World*. Harvard Business School Press. Boston Massachusetts.
- Carver, J. 2006. *Board That Make a Difference: A New Dsign for Leadership in Nonprofit and Public Organizations*. Third Edition. Jossey-Bass.
- Castanias RP, Helfat CE. 2001. The managerial rents model: theory and empirical analysis. *Journal of Management*, 27, pp 661–678.
- Chandler, A. D. 1962. *Strategy and structure*. Cambridge, MA: MIT Press.
- Chandler, A.D.1962. *Strategy and Structures: Chapters in the History of the Industrial Enterprises*. The MIT Press, Cambridge, Massachusetts.
- Chandler, Alfred D., Jr. 1977. *The Visible Hand: the Managerial Revolution in American Business*. Cambridge: the Belknap Press of Harvard University Press.
- Charan, R. 2005. Boards that Deliver: advancing Corporate Governance from Compliance to Competitive Advantage. Jossey-Bass, USA.
- Chatterjee S, Harrison JS, Bergh DD. 2003. Failed takeover attempts, corporate governance and refocusing. *Strategic Management Journal*, 24(1), pp.87–96.
- Chatterjee, S., & Wernerfelt, B. 1991. The link between resources and type of diversification: Theory and evidence. *Strategic Management Journal*, 12, pp. 33–48.
- Chatterjee, S., and Lubatkin, M. 1990, Corporate Mergers, Stockholder Diversification, and Changes in Systematic Risk, *Strategic Management Journal*, 11, 4, pp 255-268.
- Claessens, S., 2006. Corporate Governance and Development. *The World Bank Research Observer*, pp. 91-122.
- Clarke, T. (Ed) 2004. *Theories of Corporate Governance: The philosophical Foundations of Corporate governance*. Routledge, New York, NY.
- Clawson, Mark A., Klein, T. C. 1997. Indexed Stock Options: A Proposal for Compensation Commensurate with Performance, *Stanford Journal of Law, Business & Finance*, 31.

- Coase, R., 1937, *The Nature of the Firm*, 4 *Economica* (n.s.) 386.
- Cochran, P.L. and Watrick, S.L., 1988. *Corporate Governance: A review of literature*. Moristown, NJ, Financial Executives Research Foundation.
- Cochran, P.L., Wood, R.A. & Jones, T.B. 1985. The composition of boards of directors and incidence of golden parachutes. *Academy of Management Journal*, 28, pp 664-671.
- Coff, R. 1999. How buyers cope with uncertainty when acquiring firms in knowledge-intensive industries: Caveat emptor. *Organization Science*, 10(2), pp 144-161.
- Collis, D. J. 1994. How valuable are organizational capabilities? *Strategic Management Journal*, 15, Winter Special Issue, pp 143-152.
- Combs, J., and Skill, M., 2003. Managerialist and human capital explanations for key executive pay premiums: a contingency perspective. *Academy of Management Journal*, 46, pp 63-73.
- Comment, R. And Jarrell, A. 1995. Corporate Focus and Stock Returns. *Journal of Financial Economics*, 37, pp 67-87.
- Conner, K. R. 1991. An historical comparison of resource- based theory and five schools of thought within industrial organization economics: Do we have a new theory of the firm. *Journal of Management*, 17, pp 121-154.
- Canyon, M. J. 2006. Executive Compensation and Incentives. *Academy of Management Perspectives*, 20, February 2006, pp. 25-44.
- Canyon, M. J. and He, L. 2004. Compensation Committees and CEO Compensation incentives in US entrepreneurial firms. *Journal of Management Accounting Research*, available online at: <http://leeds-faculty.colorado.edu/bhagat/CompensationEntrepreneurialFirms.pdf>
- Canyon, M. J. and Peck, S.I. 1998. Board Control, Remuneration Committee and Top Management Compensation. *Academy of Management Journal*, 41(2), pp 146-157.
- Canyon, M. J., Peck, S. I. And Sadler, G. V. 2009. Compensation Consultants and Executive Pay: Evidence from the United States and The United Kingdom. *Academy of Management Perspectives*, 20, February, pp. 43-55.
- Core, J. E. and Larcker, D. F. 2002. Performance consequences of mandatory increases in executive stock ownership. *Journal of Financial Economics*, 64, pp 317-340.
- Core, J., R. Holthausen, and D. Larcker. 1999. Corporate Governance, Chief Executive Officer Compensation, and Firm Performance. *Journal of Financial Economics*, 51, pp 371-406.

Core, J.E. Guay W. and Larcker, D. 2003. Executive Equity Compensation and Incentives: A Survey. *Economic Policy Rev*, 9 (1).

Corman, S.R. 2005. Postpositivism. In May and Mumby (ed), *Engaging Organizational Communication Theory and Research*, Thousands Oaks, Sage, p. 15-34.

Cosh, A., Guest, P.M. and Hughes, A. 2006. Board-Share Ownership and Takeover Performance. *Journal of Business Finance & Accounting*, 33(3) & (4), pp.459–510.

Cotter, J.F. and Zenner, M., 1994. How Managerial Wealth Affects the Tender Offer Process. *Journal of Financial Economics*, 35(1), pp 63-97.

Crutchley, C., and Hansen, R. 1989. A Test of the Agency Theory of Managerial Ownership, Corporate Leverage and Corporate Dividends. *Financial Management*, 18, pp 36-76.

Cyert, R. M., and March, J. G. 1963. *A behavioural theory of the firm*. Englewoods Cliffs: Prentice Hall. NJ.

Cyert, R. M., Kang, S. H. And Kumar, P. Corporate Governance, Takeovers, and Top-Management Compensation: Theory and Evidence. *Management Science*, 48(4), pp. 453-469.

D'aveni, R. A. 1994. *Hypercompetition: Managing the Dynamics of Strategic Maneuvering*. Free Press, New York, NY.

Daily C.M., Dalton D.R. et Cannella A.A. 2003. Corporate Governance: Decades of Dialogue and Data. *Academy of Management Review*, 28(3), pp 371-382.

Daily, C. M. 1995. An empirical examination of the relationship between CEOs and directors. *Journal of Business Strategies*, 12(1), pp 50–68.

Daily, C. M. 1996. Governance patterns in bankruptcy reorganizations. *Strategic Management Journal*, 17, pp 355-375.

Daily, C. M., Johnson, J. L., Ellstrand, A. E. and Dalton, D. R. (1998) Compensation composition as a determinant of CEO compensation. *Academy of Management Journal*, 41(2), pp 209–20.

Dalton, D. R., Daily, C. M., Ellstrand, A. E. And Johnson, J. L., 1998. Meta-Analytic Reviews of Board Composition, Leadership Structure, and Financial Performance, *Strategic Management Journal*, 19, pp. 269–290.

Dann, L. and DeAngelo, H. 1988. Corporate Financial Policy and Corporate Control. *Journal of Financial Economics*, 20, pp 87-127.

- Datta DK, Pinches GP, Narayanan VK. 1992. Factors influencing wealth creation from mergers and acquisitions: a meta-analysis. *Strategic Management Journal*, 13(1), pp 67–84.
- Datta, D. K., and Puia, G., 1995. Cross-border Acquisitions: An Examination of the Influence of Relatedness and Cultural Fit on Shareholder Value Creation in U.S. Acquiring Firms, *Management International Review*, 35.
- Datta, S, Iskandar-Datta, M, and Raman, K. 2001. Executive Compensation and Corporate Acquisition Decisions. *The Journal of Finance*, 56(6), pp.2299-2336.
- Davidson, R., Goodwin-Stewart, J. and Kent, P. 2005. Internal governance structures and earnings management. *Accounting and Finance*, 45, pp. 241–268.
- Davis, J. H., Schoorman, F. D. & Donaldson, L. 1997. Toward a Stewardship Theory of Management. *Academy of Management Review*, 22(1), pp 20-47.
- De Fond, M., Park, C., 1999. The effect of competition on CEO turnover. *Journal of Accounting and Economics*, 27, pp 35–56.
- DeAngelo, L. 1981. Auditor Size and Auditor Quality. *Journal of Accounting and Economics*, 3, pp 183 – 200.
- DeFond, M. L., Hann, R. N. And Hu, X. 2005. Does The Market Value Financial Expertise on Audit Committees of Boards of Directors? *Journal of Accounting Research*, 43(2), pp. 153-193.
- Demb, A., and Neubauer, F. F. 1992. *The corporate board: Confronting the paradoxes*. New York: Oxford University Press.
- Demsetz, H. 1983. The Structure of Ownership and the Theory of the Firm. *Journal of Law and Economics*, 26, pp 301-325.
- Demsetz, H. and Lehn, K. 1985. The Structure of Corporate Ownership: Causes and Consequences. *The Journal of Political Economy*, 93(6), pp 1155-1177.
- Denis, D. J., Denis, D. K. and Sarin, A. 1997. Agency Problems, Equity Ownership, and Corporate Diversification. *Journal of Finance*, 52(1), pp 135-160.
- Denis, D. J., Hanouna, P. E. and Sarin, A. 2005. Is There a Dark Side to Incentive Compensation? (March). Available at SSRN: <http://ssrn.com/abstract=695583>.
- Denis, D.K., 2001. Twenty five years of corporate governance research...and counting. *Review of Financial Economics*, 10, pp 191-212.
- Dessler, G., Griffiths, J., Lloyd-Walker, B., & Williams, A. 1999, *Human Resource Management*, Prentice Hall.

- Deutsch, Y. 2005. The impact of board composition on firm's critical decisions: a meta-analytic review. *Journal of Management* 31(3), pp. 424-444.
- Dhaliwal, D.S., Naiker, V. and Navissi, F. 2006. Audit Committee Financial Expertise, Corporate Governance and Accruals Quality: An Empirical Analysis. Available on line at <http://ssrn.com/paper=906690>.
- Dhardwakar, R., George, G. and Brandes, P. 2000. Privatization in Emerging Economies: An Agency Theory Perspective. *Academy of Management Review*, 25(3), pp. 650-669.
- Di Pietra, R., Grambovas, C.A., Raonic, I and Riccaboni, A. 2008. The effect of Board size and 'busy' on the market value of Italian companies. *Journal of Management and Governance*, 12(1), pp. 73-91.
- Diamond, Douglas W. 1991. Debt Maturity Structure and Liquidity Risk. *Quarterly Journal of economics*, 439, pp 1027-1054.
- Dierickx, I., & Cool, K. 1989. Asset, Stock Accumulation And Sustainability Of Competitive Advantage. *Management Science*, 35(12), pp 1504-1513.
- DiMaggio, P. & Powell, W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48, pp 147-160.
- Dodd, P. 1980. Merger proposals, management discretion, and stockholder wealth. *Journal of Financial Economics* 8, pp. 105-138.
- Donaldson, L. 1990. The Ethereal Hand: Organizational Economics and Management Theory. *Academy of Management Review*, 15, pp 369-381.
- Donaldson, L. and Davis, J. H. 1991. Stewardship Theory or Agency Theory: CEO Governance and Shareholder Returns. *Australian Journal of Management*, 16, pp 49-64.
- Dosi, G., Faillo, M. and Marengo, L. 2003. Organizational Capabilities, Patterns of Knowledge Accumulation and Governance Structures in Business Firms: An Introduction. *Unpublished Paper*. Presented at the Centre Saint Gobain for Economic Studies Conference on "Organizational Innovation Within Firms. (Paris 7-8 November 2002).
- Dosi, G., Nelson R. and Winter S.G.(eds.). 2000. *The Nature and Dynamic of Organizational Capabilities*. Oxford/New York, Oxford University Press.
- Durand, R. & Vargas, V. 2003. Ownership, organization, and private firms' efficient use of resources. *Strategic Management Journal*, 24, 667-675.

- Dutta, S., Datta, M.I. and Raman, K., 2001. Executive Compensation and Corporate Acquisition Decisions. *Journal of Finance*, 56, 6, pp 2299-2336.
- Dyck, A. and L. Zingales., 2004. Private Benefits of Control: An International Comparison. *Journal of Finance*, Vol. 59(2), pp. 537-600.
- Easterbrook, F. 1984. Two Agency-Cost Explanations of Dividends. *The American Economic Review*, 74(4), pp 650-659.
- Easterbrook, F., and Fischel D. 1991. *The Economic Structure of Corporate Law*. Harvard University Press, Cambridge, Mass.
- Eckbo, E. B. and Thorburn, K., 2000. Gains to Bidder Firms Revisited: Domestic and Foreign Acquisitions in Canada. *Journal of Financial and Quantitative Analysis*, 35, pp. 1-25.
- Eckbo, E.B., 1986. Mergers and the market for corporate control: The Canadian evidence. *Canadian Journal of Economics*. 19(2), pp 236-260.
- Eckbo, E.B., 1992. Mergers and the value of antitrust deterrence. *Journal of Finance*, 47(3), pp 1005-1029.
- Edlin, A. S. and Stiglitz, J. H. 1995. Discouraging Rivals: Managerial Rent-Seeking and Economic Inefficiencies. *The American Economic Review*, 85(5), pp 1301-1312.
- Efron, B. & Tibshirani, R.J. 1993: *An introduction to the bootstrap*. - Chapman and Hall, Boca Raton, Florida, USA.
- Eisenberg, T., Sundgren, S. and Wells, M. 1998. Larger Board Size and Decreasing Firm Value in Small Firms. *Journal of Financial Economics*, 48, pp. 35-54.
- Eisenhardt, K. M., & Schoonhoven, C. B. 1990. Organizational growth: Linking founding team, strategy, environment, and growth among US semiconductor ventures, 1978-1988. *Administrative Science Quarterly*, 35: 504-529.
- Eisenhardt, K. M., 1989. Agency Theory: An Assessment and Review. *Academy of Management Review*, 14, pp 57-74.
- Eisenhardt, K., & Martin, J. (2000). Dynamic capabilities: What are they? *Strategic Management Journal*, 21, pp 1105-1121.
- Elgers, P. T., J. J. Clark. 1980. Merger types and shareholder returns: Additional evidence. *Financial Management*, 9, pp 66-72.
- Ellstrand, A. E., Daily, C. M., Johnson, J. L., & Dalton, D. R. 1999. Governance by committee: The influence of board of directors' committee composition on corporate performance. *Journal of Business Strategies*, 16, pp 67-88.

Emerson, Richard M. 1962. Power-dependency relations. *American Sociological Review*, 27, pp 32-41.

Estes, R. M. 1980. Corporate Governance in the Courts, *Harvard Business Review*, 51, pp 107-114.

Etzioni, A., 1988. *The Moral Dimension: Toward a New Economics*, New York, The Free Press.

Fama, E. F., 1980, Agency Problems and the Theory of the Firm, *The Journal of Political Economy*, 80(2), pp 288-307.

Fama, E., Fisher, L., Jensen, M., Roll, R., 1969. The adjustment of stock prices to new information. *International Economic Review*, 10, pp. 1-21.

Fama, E.F., Jensen, M.C., 1983, Separation of Ownership and Control, *Journal of Law and Economics*, 26, June, pp 301-326.

Farinha, Jorge, 2003, *Corporate Governance: A Survey of the Literature*. Universidade do Porto Economia Discussion Paper No. 2003-06. Available at SSRN: <http://ssrn.com/abstract=470801>.

Farrell, J. and Shapiro, c., 2001. Scale Economies and Synergies in Horizontal Merger Analysis. *Antitrust Law Journal*, 68, 685-710.

Fawcett, T. 2006. An Introduction to ROC Analysis. *Pattern Recognition Letters*, Vol. 27, pp. 861-874.

Ferris, S. Jagannathan, M. And Pritchard, A. C. 2003. Too Busy to Mind the Business? Monitoring by Directors with Multiple Boards Appointments. *The Journal of Finance*. Vol. LVIII, No 3, pp. 1087-1111.

Fich, E. M. And Shivdasani, A. 2006. Are Busy Boards Effective Monitors? *The Journal of Finance*, Vol. LXI, No 2, pp. 689-724.

Finegold, D., Benson, G. S. and Hecht, D. 2007. Corporate Boards and Company Performance: review of research in light of recent reforms. *Corporate Governance: An International Review*, 15(5), pp. 865-878.

Finkelstein S., 1992. Power in Top Management Teams: Dimensions, Measurement, and Validation. *Academy of Management Journal*; 35: p.505-538.

Finkelstein, S. and D'Aveni, R. A. 1994. CEO duality as a double-edged sword: How board of directors balance entrenchment avoidance and unity of command. *Academy of Management Journal*, 37, pp 1079-1108.

Finkelstein, S. and Hambrick, D. 1996. *Strategic Leadership: Top Executive and Their Effects on Organizations*. Minneapolis, St. Paul: West Pub. Co.

Finkelstein, S., & Hambrick, D. 1996. *Strategic leadership: Top Executives and their effects on organizations*. St. Paul, MN: West.

Finkelstein, S., & Hambrick, D. C. 1988. Chief executive compensation: A synthesis and reconciliation. *Strategic Management Journal*, 9, pp. 543-558.

Finkelstein, S., Hambrick, D. C. & Cannella, Jr., A. A., 2009. *Strategic Leadership: Theory and Research on Executives, Top Management Teams, and Boards*. New York, NY: Oxford University Press.

Firth, M., 1991. Corporate Takeovers, Stockholder Returns and Executive Rewards. *Managerial and Decision Economics*, 12(6), pp 421-428.

Fisher, J. W. 1986. Crafting policy for performance and rewards. *Directors & Boards*, 10(2), pp.26-2.

Flanagan, D. 1996, Announcements of Purely Related and Purely Unrelated Mergers and Shareholder Returns: Reconciling the Relatedness Paradox, *Journal of Management*, 22.

Flannery, M. J. 1986. Asymmetric information and risky debt. *Journal of Finance*, 41, pp 19-37.

Fligstein, N. and Feeland, R. 1995. Theoretical and Comparative Perspectives on Corporate Organization. *Annual Review of Sociology*, 21, pp 21-43.

Fluck, Z. 1998. Optimal Financial Contracting: Debt versus Outside Equity. *Review of Financial Studies*, 11, pp 383-418.

Forbes, D. P. and Milliken, F. J., 1999. Cognition and Corporate Governance: Understanding Boards of Directors as Strategic Decision-Making Groups. *Academy of Management Review*, 24, pp 489-505.

Foss, N. J., Knudsen, C., & Montgomery, C. A. 1995. An exploration of common ground: Integrating evolutionary and strategic theories of the firm. In C. A. Montgomery (Ed.), *Resource-based and evolutionary theories of the firm: Towards a synthesis* (pp 1-18). Norwell, MA: Kluwer.

Franks, J. R., R. Harris and S. Titman. 1991. The post-merger share price performance of acquiring firms. *Journal of Financial Economics*, 29, pp 81 -96.

Franks, J., Mayer, C. and Renneboog, L. 2001. Who disciplines management in poorly performing companies? *Journal of Financial Intermediation*, 10, pp 209-48.

Franks, J.R., Harris, R.S., & Mayer, C., 1988. Means of payment in takeovers: Results for the United Kingdom and the United States. In A.J. Auerbach (Ed.),

Corporate takeovers: Causes and consequences. Chicago: University of Chicago Press. pp 221-258.

French, J. R. P. and Raven, B. 1959. The bases of social power. In Cartwright D. *Studies in Social Power*, pp 150-167. Ann Arbor: University of Michigan Institute for Social Research.

Fukuyama, F. 1995. *Trust: The social virtues and the creation of prosperity*. New York, NY: Free Press.

Gadhouri, Y., 2006. Power of Ultimate Controlling Owners: A Survey of Canadian Landscape. *Journal of Management & Governance*, 10 (2), pp. 179-204.

Gaughan, P., 2005, *Mergers and Acquisitions: What can Go Wrong and How To Prevent It*, John Wiley & Sons Inc.

Gibbs, P. A. 1993. Determinants of corporate restructuring: The relative importance of corporate governance, takeover threat, and free cash flow. *Strategic Management Journal*, 14, pp 51-68.

Gibson, J. L., Ivancevich, J. M. and Donnelly J. H. 1991. *Organizations*. Homewood, IL: Irwin.

Giliberto, M. S., and Varaiya, N. P., 1989. The winner's curse and bidder competition in acquisitions: Evidence from failed bank auctions. *Journal of Finance*, 44, 1, pp 59-75.

Gilson, S., 1989., Management Turnover and Financial Distress. *Journal of Financial Economics*, 25, pp 241-262.

Gladstein, D. L., 1984. Groups in context - a model of task group effectiveness. *Administrative Science Quarterly*, 29(4), 499-517.

Godfrey, P. C., & Hill, C.W. L. 1995. The problem of unobservables in strategic management research. *Strategic Management Journal*, 16, 519-533.

Goldberg, W. H. 1983. *Mergers: Motives, Modes, Methods*. Gower, Aldershot, England.

Golden, B. R. and Zajac, E. J. 2001. When Will Boards Influence Strategy? Inclination x Power = Strategic Change, *Strategic Management Journal*, 22, pp. 1087-1111.

Gomez-Mejia L.R., Wiseman R.M. 1997. Reframing executive compensation: an assessment and outlook. *Journal of Management* 23, pp 291-374.

Gomez-Mejia, L. R., Tosi, H., & Hinkin, T. 1987. Managerial control, performance, and executive compensation. *Academy of Management Journal*, 30, pp 51-70.

Gompers, P., Ishii, J. & Metrick, A. 2003. Corporate Governance and Equity Prices. *Quarterly Journal of Economics*, February.

Goodstein, J., Gautam, K. and Boeker, W., 1994. The Effects of Board Size and Diversity on Strategic Change. *Strategic Management Journal*, 15, pp 241-250.

Gopinath, C., Siciliano, J.I and Murray, R.L, 1994. Changing Role of Board of Directors: In Search of a New Strategic Identity. *The Mid Atlantic Journal of Business*, 30(2).

Grant RM. 1996. Toward a knowledge-based theory of the firm. *Strategic Management Journal*, Winter Special Issue, 17, pp.109-122.

Grant, R. 1991. The Resource-based Theory of Competitive Advantage: Implications for Strategy Formulation. *California Management Review*, 33(3), pp 114-135.

Greenwood, R. and Hinings, C. R. 1996. Understanding Strategic Change: The contribution of Archetypes. *Academy of Management Review*, 21, pp 1022-1054.

Grossman, S. J., and Hart, O. D. 1982. Corporate Financial Structure and Managerial Incentives. In: *The Economics of Information and Uncertainty*. Ed. by J. J. McCall. Chicago: The University of Chicago Press, pp 123-155.

Gude, J.A., Jiminez, M.D., Mack, C.M., Meier, T.J., Nadeau, M.S. & Smith, D.W. 2008: Estimation of successful breeding pairs for wolves in the U.S. northern Rocky Mountains. - *Journal of Wildlife Management* 72: 881-891.

Hafsi, T. and Toulouse, J-M. 1994. Acquisitions et fusions: les choix stratégiques en conflit avec leur mise en œuvre?. *Revue Gestion*, 02/94. .

Hair, J.F., Anderson, R.E. Tatham, R.L. and Black, W.C., 1998. *Multivariate Data Analysis*. Fifth edition. Englewood Cliffs, New Jersey: Prentice Hall.

Haleblian, J., and Finkelstein, M. 1999. The influence of organizational acquisition experience on acquisition performance: a behavioural perspective, *Administrative Science Quarterly*, 44, pp 29-56.

Haleblian, J., and Finkelstein, S. 1993. Top management size, CEO dominance, and firm performance: The moderating roles of environmental turbulence and discretion. *Academy of Management Journal*, 36, pp 844-864.

Hambrick, D.C., 1981. Environment, Strategy and Power within Top Management Teams. *Administrative Science Quarterly*, June 1981.

Hambrick, D. C., and D'Aveni, R. A., 1992. Top team deterioration as part of the downward spiral of large corporate bankruptcies. *Management Science*, 28, pp 1445-1466.

Hambrick, D. C., and Mason, P. A. 1984. Upper echelons: The organization as a reflection of its top managers. *Academy of Management Review*, 9, pp 193-206.

Hamel, G. and Prahalad, C. K. 1992. Letters to the Editor in response to the comments of Stalk et al, 1992. *Harvard Business Review*, May/June, p 165.

Harford, J. 2003. Takeover bids and target directors' incentives: The impact on directors' wealth and board seats. *Journal of Financial Economics*, 69, pp.51-83.

Harrison, J.S., Hitt, M.A., Hoskisson, R. E., Ireland, R.D. 2001. Resource complementarity in business combinations: Extending the logic to organizational alliances. *Journal of Management*, 27, pp. 679-690.

Harrell, F.E., Jr. 2001: *Regression modeling strategies, with application to linear models, logistic regression, and survival analysis*. - Springer- Verlag, New York.

Harrell, F.E., Jr., Lee, K.L. & Mark, D.B. 1996: Tutorial in biostatistics; multivariable prognostic models: issues in developing models, evaluating assumptions and adequacy, and measuring and reducing errors. *Statistics in Medicine*. Vol. 15: pp. 361-387.

Harris, I. C., & Shimizu, K. 2004. Too busy to serve? An examination of the influence of overboarded directors. *Journal of Management Studies*, 41(5): 775-798.

Harrison, J. S., Hitt, M. A., Hoskisson, R. E., & Ireland, R. D. 1991. Synergies and post-acquisition performance: Differences versus similarities in resource allocations. *Journal of Management*, 14, pp 173-190.

Harrison, J. S., Hitt, M. A., Hoskisson, R. E., and Ireland, R. D., 1991. Synergies and post-acquisition performance: Differences versus similarities in resource allocations. *Journal of Management*, 17, pp 173-190.

Hartzell, J., Starks, L., 2003. Institutional investors and executive compensation. *Journal of Finance*, 58, pp 2351- 2374.

Hartzell, J.C., Ofek, E., & Yermack, D. 2004. What's in it for me? CEOs whose firms are acquired. *The Review of Financial Studies*, 17(1), pp. 37-61.

Haspeslagh P.C., and Jemison, D.B. 1991. *Managing Acquisitions: Creating Value Through Corporate Renewal*. Free Press: New York.

Haunschild, P. 1993. Interorganizational imitation: The impact of interlocks on corporate acquisition activity. *Administrative Science Quarterly*, 38, pp 564-592.

Haunschild, P. 1994. How Much Is That Company Worth? Interorganizational Relationships, Uncertainty, and Acquisition Premiums. *Administrative Science Quarterly*, 39 (3), pp.391-411.

- Haunschild, P. R., and Beckman, C. M. 1998. When do interlocks matter?: Alternate sources of information and interlock influence. *Administrative Science Quarterly*, 43, pp 815-844.
- Hausman, J.A., 1978. Specification tests in econometrics. *Econometrica* 46, 1251-1271.
- Hayes, R. M., H. Mehran, S. Schaefer, 2004. Board Committee Structures, Ownership, and Firm Performance. *Working Paper*.
- Hayward, M. L. A., and Hambrick, D. C., 1997. Explaining the premium paid for large acquisitions: Evidence of CEO hubris. *Administrative Science Quarterly*, 42, pp 103-127.
- Healy, P. M, Palepu, K. G. and Ruback, R. S. 1990. Does Corporate Performance Improve After Mergers? *National Bureau Of Economic Research (NBER), Working Paper # 3348*.
- Healy, P. M. 1985. The effects of bonus schemes on accounting decisions. *Journal of Accounting and Economics*, 7, pp 85- 107.
- Heidrick & Struggles, 2007. 10th annual corporate board effectiveness study.
- Helfat, C., and Lieberman, M. 2002. The Birth Of Capabilities: Market Entry And The Importance Of Pre-history, *Industrial and Corporate Change*, 11(4), pp 725-760.
- Helfat, C., Finkelstein, S., Mitchell, W., Peteraf, M., Singh, H., Teece, D. and Winter, S., 2007. *Dynamic Capabilities: Understanding Strategic Change in Organisations*. Blackwell Publishing, Malden.
- Hempel, Carl G. 1965. *Aspects of Scientific Explanation and Other Essays in the Philosophy of Science*. New York: The Free Press.
- Henderson, Richard I. 1997. *Compensation Management in a Knowledge-Based World*, 7th ed. New York: Prentice-Hall.
- Hendry, K. and Kiel, G. C. 2004. The Role of the Board in Firm Strategy: Integrating Agency and Organisational Control Perspectives. *Corporate Governance: An International Review*, 12, 4, pp 500-520.
- Hermalin, B. E., and Weisbach, M.S., 2003. Boards of Directors as an Endogenously Determined Institution: A Survey of The Economic Literature. *Economic Policy Review- Federal Reserve Bank of New York*, 9(1), pp 7-26.
- Hermalin, B., and Wiesbach M. 1991. The Effect of Board Composition and Direct Incentives on Firm Performance. *Financial Management*, 20, pp 101-112.

- Herman, E. 1981. *Corporate control, corporate power*. New York: Cambridge University Press.
- Hill, C.W.L. & Snell, S.A. 1988. External control, corporate strategy, and firm performance in research intensive industries. *Strategic Management Journal*, 9, pp 577-590.
- Hill, S. 1995. The social organization of boards of directors. *British Journal of Sociology*, 46(1), pp 245-277.
- Hillman, A. J. and Dalziel. T. 2003. Boards of Directors and Firm Performance: Integrating Agency and Resource Dependence Perspectives. *Academy of Management Review*, 28(3), pp 383-396.
- Hillman, A. J., Cannella, A. A. and Paetzold, R. L. 2000. The Resource Dependence Role of Corporate Directors: Strategic Adaptation of Board Composition in Response to Environmental Change. *Journal of Management Studies*, 37, pp 235-255.
- Hitt M. A., Harrison J. S., and Ireland R. D. 2001. *Mergers and Acquisitions: A Guide to Creating Value for Stakeholders*. Oxford University Press: Oxford, U.K.
- Hitt, M. A., and Tyler, B. B. 1991. Strategic decision models: Integrating different perspectives. *Strategic Management Journal*, 12, pp 327-351.
- Hitt, M., Harrison, J., Ireland R.D., and Best A. 1998. Attributes of successful and unsuccessful acquisition of U.S. firms. *British Journal of Management*, 9, pp. 91-114.
- Hitt, M.A., Ireland, R.D. and Hoskisson, R.E. 2003. *Strategic Management: Competitiveness and Globalization*. 5th Edition, Cincinnati, OH: Southwestern College Publishing.
- Holderness, C.G. 2003. A survey of blockholders and corporate control. *Economic Policy Review*, 9 (1), pp 52-64.
- Horner, S.V. 2006. *Director Ties, Board Experience, and Firm Strategic Outcomes: Board Experience Effects on Post-Acquisition Performance*. Doctoral Thesis, University of Missouri- Columbia.
- Hopkins, H. D., 1987. Long-term Acquisition Strategies in the U.S Economy. *Journal of Management*, 31, pp 557-572.
- Hoskisson, R. E., & Hitt, M. A. 1990. Antecedents and performance outcomes of diversification: Review and critique of theoretical perspectives. *Journal of Management*, 16, pp. 461-509.
- Hoskisson, R. E., Hitt, M. A., and Hill, C. W. L. 1993. Managerial incentives and investment in R&D in large multiproduct firms. *Organization Science*, 4, pp 325-341.

- Hoskisson, R.E., Hitt, M.A., Wan, W.P. and Yu, D. 1999, Theory and Research in Strategic management: Swings of a Pendulum. *Journal of Management*, 25(3), pp 417-456.
- Hosmer, D.W. & Lemeshow, S. 2000. *Applied logistic regression*. John Wiley and Sons, New York, New York, USA.
- Hubbard, R.G. and Palia, D., 1995. Benefits of Control, Managerial Ownership, and the Stock Returns of Acquiring Firms. *Rand Journal of Economics*, 26, pp 782-92.
- Hunt, S. D. 1991, *Modern Marketing Theory: Critical Issues in the Philosophy of Marketing Science*, Cincinnati, OH: South-Western.
- Hunt, S.D. 2005, For Truth and Realism in Management Research. *Journal of Management Inquiry*, Vol.14(2), pp. 127-138.
- Hunt, S.D. and Hansen, J.M. 2008. *The Philosophical Foundations of Marketing Research : For Scientific Realism and Truth*, Chap.7, pp.111-126, in MacLaran et al, The Sage Handbook of Marketing Theory.
- Ireland, R. D. and Hitt, M. A. 1999. Achieving and maintaining strategic competitiveness in the 21st century: The role of strategic leadership *The Academy of Management Executive*, 13(1), pp 43-57.
- Jain, B., and Kini, O. 1999. On Investment Banker Monitoring in the New Issues Market. *Journal of Banking and Finance*, 23, pp 49-84.
- Janis, I.L. 1982. *Groupthink*. Boston: Houghton Mifflin.
- Jarrell, G.A. and Poulsen, A. B., 1989. The Returns to Acquiring Firms in Tender Offers: Evidence from Three Decades. *Financial Management*, 18, pp 12-20.
- Jensen M.C., 1993. The Modern Industrial Revolution, Exit, and the Failure of Internal Control Systems, *The Journal of Finance*, 48(3), pp 831-880.
- Jensen MC. 1986. Agency costs of free cash flow, corporate finance, and takeovers. *American Economic Review* 76, pp 323-329.
- Jensen, G. R.; D. P. Solberg; and T. S. Zorn. 1922. Simultaneous Determination of Insider Ownership, Debt, and Dividend Policies. *Journal of Financial and Quantitative Analysis*, 27, June, pp 247-263.
- Jensen, M. C., Murphy, K. J. 1990. CEO Incentives: It's Not How Much You Pay, But How. *Harvard Business Review*.
- Jensen, M., and Ruback R. 1983. The Market for Corporate Control - the Scientific Evidence. *Journal of Financial Economics*, 11, pp 5-50.

Jensen, M.C. 1985. Takeovers – folklore and science. *Harvard Business Review*, 62, pp 109-21.

Jensen, M.C. and Murphy, K. J. 1990. Performance Pay and Top-Management Incentives. *The Journal of Political Economy*, 98(2), pp 225-264.

Jensen, M.C. et Meckling W. 1976, Theory of the firm: Managerial Behavior, agency costs and ownership structures, *Journal of Financial Economics*, (3), pp 305-360.

Jensen, M.C. Murphy, K. J., and Wruck, E.G. 2004, Remuneration: Where we've been, How we Got to Here, What are the Problems and How to fix them. *ECG/ Working Paper in Finance*, N.44/2004. <http://ssrn.com/abstract=561305>.

Jensen, Michael C. 1993. The Modern Industrial Revolution, Exit and the Failure of Internal Control Systems. *Journal of Finance*, 6(4), pp 831-880.

Jiraporn, P., Davidson, W. N., DaDalt, P. And Ning, Y. 2009. Too Busy to show up? An Analysis of Directors' absences. *The Quarterly Review of Economics and Finance*, 49, pp. 1159-1171.

Johnson, G., Scholes, K. And Whittington, R. 2005. *Exploring Strategy*. 7th Edition, Prentice Hall-Financial Times.

Johnson, J. L., Daily, C. M. and Ellstrand, A. E., 1996. Boards of Directors: A Review and Research Agenda, *Journal of Management*, 22, pp 409–438.

Johnson, R. A., Hoskisson, R. E., and Hitt, M. A., 1993. Board of director Involvement in Restructuring: The effects of Boards Versus Managerial Controls and Characteristics. *Strategic Management Journal*, 14, *Special Issue: Corporate Restructuring*, pp 33-50.

Johnson, S., La Porta, R., Lopez-de-Silanes, F. and Shleifer, A., 2000. Tunnelling. *American Economic Review*, 90, pp. 22-27.

Johnson, S., Ryan, H., & Tian, Y. 2003. Executive Compensation and Corporate Fraud. *Working Paper*, Louisiana State University.

Jones, T. M., & Goldberg, L. D. (1982) Governing the large corporation: More arguments for public directors. *Academy of Management Review*, 7, pp 603-611.

Judge, T. A., & Ferris, G. R. 1993. Social context of performance evaluation decisions. *Academy of Management Journal*, 36: 80-105.

Judge, W.Q, Zeithaml, C.P. 1992. Institutional and Strategic Choice Perspectives on Board involvement in the Strategic Decision Process. *Academy of Management Journal*, 35(4), pp 766-794.

Kaplan, S. and Reishus, D. 1990. Outside directorships and corporate performance. *Journal of Financial Economics*, 27, pp. 389–410.

Kaplan, S. N., and Weisbach, M. S. 1992. The success of acquisitions: evidence from divestitures. *Journal of Finance*, XLVII, pp 107–138.

Karim, S., Mitchell, W. 2000. Path-Dependent and Path-Breaking Change: Reconfiguring Business Resources Following Acquisitions in the U.S Medical Sector, 1978-1995. *Strategic Management Journal*, 21, 10/11: *Special issue: The evolution of Firm Capabilities*, pp 1061-1081.

Karpoff, J. M., 2001. The Impact of Shareholder Activism on Target Companies: A Survey of Empirical Findings. (August 18, 2001). Available at SSRN: <http://ssrn.com/abstract=885365>.

Karuna, C., 2005. The Effect of Industry Product Market Competition on Managerial Incentives and Pay. *Journal of Accounting and Economics*, 43, pp 275-297.

Kerr, J. L. and Kren, L. 1992. Effect of Relative Decision Monitoring on Chief Executive Compensation. *Academy of Management Journal*, 35, pp 370–397.

Kesner, I. F. 1988. Director characteristics and committee membership: An investigation of type, occupation, tenure, and gender. *Academy of Management Journal*, 31, 66-84.

Kesner, I.F. 1987. Directors' stock ownership and organizational performance: An investigation of Fortune 500 companies. *Journal of Management*, 13, pp 499-507.

Kesner, I.F. and Johnson, R.B., 1990. An investigation of the relationship between board composition and stockholder suits. *Strategic Management Journal*, 11, pp 327-336.

Khorana, A. and Zenner, M., 1998. Executive Compensation of Large Acquirers in the 1980s. *Journal of Corporate Finance*, 4, pp 209–240.

King, D., Dalton, D. R., Daily, C. M., and Covin, J. G. 2004. Meta-Analysis of Post-Acquisition Performance: Indications of Unidentified Moderators. *Strategic Management Journal*, 25, pp 187-200.

King, M. R. And Santor, E. 2008. Family values: Ownership structure, performance and capital structure of Canadian firms. *Journal of Banking & Finance*, 32(11), pp. 2423-2432.

Klein, A. 2002. Audit committee, board of director characteristics, and earningsmanagement. *Journal of Accounting and Economics*, 33, pp 375-400.

Klein, W. A. 1982. The modern business organization: Bargaining under constraints. *The Yale Law Journal*, 91, pp 1521-1564.

Kleinbaum, D. G. and Klein, M. 2002. Logistic Regression: A Self-Learning Text. Second Edition. Springer-Verlag, New York.

Koh, P., Laplante, S. and Tong, Y. 2007, Accountability and value enhancement roles of corporate governance. *Accounting and Finance*, 47, pp. 305–333.

Kor, Y. Y. And Sundaramurthy, C. 2008. Experience-Based Human Capital and Social Capital of Outside Directors. *Journal of Management*, 35 (4), pp.981-1006.

Kor, Y.Y. and Misangyi, V. F. 2008. Outside Directors' Industry-Specific Experience and Firms' Liability of Newness. *Strategic Management Journal*, 29, pp. 1345-1355.

Korn, H. J., Milliken, F. J., & Lant, T. K. 1992. Top management team change and organizational performance: The influence of succession, composition, and context. *Paper presented at the annual meeting of the Academy of Management, Las Vegas, NV.*

Korn/Ferry International, 2008. *Corporate Board Governance and Director Compensation in Canada, A Review of 2008.*

Kosnik, R. D., 1990. Effects of Board Demography and Directors' Incentives on Corporate Greenmail Decisions. *Academy of Management Journal*, 33, pp 129–150.

Kosnik, R.D. 1987. Greenmail: A study of board performance in corporate governance. *Administrative Science Quarterly*, 32, pp 163–185.

Kosnik, R.D. 1987. Greenmail: A Study of Board Performance in Corporate Governance. *Administrative Science Quarterly*, 32, pp 163–85.

Kren, L., and Kerr, J. L., 1997. The effects of outside directors and board shareholdings on the relation between chief executive compensation and firm performance. *Accounting and Business Research*, 27, pp 297–309.

Kroll, M., Walters, B. A and Le, S. A. 2007. The Impact of Board Composition and Top Management team Ownership Structure on Post-IPO Performance in Young Entrepreneurial Firms. *Academy of Management Journal*, 50(5), pp. 1198-1216.

Kroll, M., Wright, P., Toombs, L., Leavell, H., 1997. Form of control: a critical determinant of acquisition performance and CEO rewards. *Strategic Management Journal*, 18, pp 85– 96.

Kroll, T. W. and Theerathorn, S. J., 1993. Whose Interests Do Hired Top Managers Pursue? An Examination of Select Mutual and Stock Life Insurers. *Journal of Business Research* 26, pp 133–148.

Krug, J. and R. Aguilera 2005. Top Management Team Turnover in Mergers and Acquisitions in *Advances in Mergers and Acquisitions*, volume 4, pp. 121–149.

Kuhn, Thomas S. 1962. *The Structure of Scientific Revolutions*. Chicago, IL.

- Kumar, R., and Sopariwala, P. 1992. The effect of adoption of long-term performance plans on stock prices and accounting numbers, *Journal of Financial and Quantitative Analysis*, 27, pp. 561-57.
- Kutner, M. H., Nachtsheim, C. J., Neter, J. and Li, W. 2005. *Applied Linear Statistical Models*. International Edition: McGraw Hill/Irwin. New York.
- La Porta, R., F. Lopez-De-Silanes and A. Shleifer. 1998. Law and Finance. *Journal of Political Economy*, Vol. 106, pp. 1113-55.
- Lane, P. J., Cannella, A. A., and Lubatkin, M. H., 1998. Agency Problems as antecedents to unrelated Mergers and Diversification: Amihud and Lev Reconsidered. *Strategic Management Journal*, 19(6), pp 555-578.
- Lang, L., Stulz, R., and Walkling, R., 1989. Managerial Performance, Tobin's Q, and the Gains from Successful Tender Offers. *Journal of Financial Economics*, 24(1), pp 137-154.
- Laporta, R., Lopez-de-Silanes, F., Shleifer, A. and Vishny, R. 1999. Corporate Ownership around the World. *Journal of Finance*, 54, pp 471-517.
- Larsson, R. 1990. Coordination of Action in Mergers and Acquisitions: Interpretive and Systems Approaches Towards Synergy. *Doctoral dissertation*. Lund, Sweden: Lund University Press.
- Lawler, E. E., 1986. *High Involvement management*. San Francisco: Jossey-Bass.
- Lawler, E. E., 1992. *The Ultimate Advantage*. San Francisco: Jossey Bass.
- Lawrence, P. R., Lorsch, J. W. 1967. Differentiation and integration in complex organizations. *Administrative Science Quarterly*, 12, pp 1-47.
- Leblanc, R., Gillies, J. 2005. *Inside The Boardroom: How Boards Really work and The Coming Revolution in Corporate Governance*. Wiley and Sons, Canada.
- Lewellen, W., Loderer, C., and Rosenfeld, A., 1985. Merger Decisions and Executive Stock Ownership in Acquiring Firms. *Journal of Accounting and Economics*, 7, pp 209-31.
- Lewllen, W.G., 1971. A pure financial rational for the conglomerate merger. *Journal of finance*, 26, pp 521-537.
- Lipton, M. & Lorsch, J. W. 1992. A modest proposal for improved corporate governance. *The Business Lawyer*, 48(1), pp 59-77.
- Loderer C. and Martin, K., 1990. Corporate Acquisitions by Listed Firms: The Experience of a Comprehensive Sample. *Financial Management*, 19(4), pp 17-33.

Loderer C. and Martin, K., 1992. Postacquisition Performance of Acquiring Firms. *Financial Management*, 21(3), pp 69-79.

Loderer, C. F., and Martin, K. 1997. Executive Stock Ownership and Performance: Tracking Faint Traces. *Journal of Financial Economics*, 45, pp 223-255.

Loderer, C. F., and Sheehan, D.P. 1989. Corporate Bankruptcy and Managers' Self-Serving Behaviour. *Journal of Finance*, 44(4), pp 1059-1075.

Lorsch, J.W. & MacIver, E. 1989. *Pawns and potentates: The reality of America's corporate boards*. Boston. Harvard Business School Press.

Loughran, T. and Vijh, A., 1997. Do Long-Term Shareholders Benefit From Corporate Acquisitions? *Journal of Finance*, 52(5), pp 1765-1790.

Lubatkin, M. 1983. Mergers and the performance of the acquiring firm. *Academy of Management Review*, 8, pp 218-225.

Lubatkin, M. 1987. Merger strategies and stockholder value. *Strategic Management Journal*, 8, pp 39-53.

Lubatkin, M., and O'Neill, H. 1987, Merger Strategies and Capital Market Risk. *Academy of Management Journal*, 30.

Luoma, P. and Goodstein, J., 1999. Stakeholders and Corporate Boards: Institutional Influences on Board Composition and Structure. *Academy of Management Journal*, 42(5).

Mace, M. 1971. *Directors: Myth and reality*. Cambridge, MA: Harvard University Press.

Magenheim, E. B. and Mueller, D. C., 1988. Are acquiring firm shareholders better off after an acquisition? in John Coffee, Jr., Louis Lowenstein, and Susan Rose-Ackerman, eds.: *Knights, Raiders and Targets*. Oxford University Press, Oxford, England, pp 171-193.

Mahoney, J. T., and Pandian, J. R. 1992. The resource-based view within the conversation of strategic management. *Strategic Management Journal*, 13, pp 363-380.

Main, B. G., Jackson, C., Pymm, J. and Wright, V. 2008. The Remuneration Committee and Strategic Human Resource Management. *Corporate Governance: An International Review*, 16(3), pp. 225-238.

Malatesta, Paul H., 1983. The wealth effects of merger activity and the objective functions of merging firms. *Journal of Financial Economics*, 11, pp 155-181.

Mallette, P., & Fowler, K. L. 1992. Effects of board composition and stock ownership on the adoption of poison pills. *Academy of Management Journal*, 35: 1010-1035.

Mangel, R., & Singh, H. 1993. Ownership structure, board relationships and CEO compensation in large US corporations. *Accounting and Business Research*, 23 (91A), pp 339-350.

March, J. G. 1994. *A Primer on Decision Making: How Decisions Happen*. New York: Free Press.

March, J. G. And Olsen, J. P. 1989. *Rediscovering Institutions: The Organizational Basis of Politics*. New York: Free Press.

Marino, K.E., 1996. Developing consensus on firm competencies and capabilities. *Academy of Management Executive*, 10, pp 40-51.

Martin, K. And McConnell, J. 1991. Corporate Performance, Corporate Takeovers, and Management Turnover. *The Journal of Finance*, 46(2), pp 671-687.

Maslow, A. H., 1968. *Toward a Psychology of Being*, D. Van Nostrand Company.

Maury, B. 2006. Family Ownership and Firm Performance: Empirical Evidence from Western European corporations. *Journal of Corporate Finance*, 12, pp.321-341.

May, D. 1995. Do Managerial Motives Influence Firm Risk Reduction Strategies? *Journal of Finance*, 50, pp 1291-1308.

McConaughy, D., Matthews, C. and Fialko, A. 2001. Founding family controlled firms: performance and value. *Journal of Small Business Management*, 39(1), pp.111-123.

McConaughy, M.L., M.C. Walker, G.V. Henderson Jr. and C.S. Mishra, 1998. Founding Family Controlled Firms: Efficiency and Value. *Review of Financial Economics*, 7, pp. 1-19.

McConnell, J. J., and Servaes, H. 1990. Additional Evidence on Equity Ownership and Corporate Value. *Journal of Financial Economics*, 27, pp 595-612.

McDonald, M. L., Westphal, J. D. and Graebner, M.E. What Do They Know? The Effect of Outside Director Acquisition Experience On Firm Acquisition Performance. *Strategic Management Journal*, 29, pp. 1155-1177.

McGrath, J. E. 1984. *Groups: Interaction and performance*. Englewood Cliffs, NJ: Prentice Hall.

McGrath, R.G., MacMillan, I.C., Venkatraman, S. 1995. Defining and developing competence: a strategic process paradigm. *Strategic Management Journal*, 16, pp 251-275.

- McGregor, D. and Bennis, W.G., 1960. *The Human Side of Enterprise*, McGraw Hill/ Irwin.
- McNulty, T. and Pettigrew, A. 1999. Strategists on the Board, *Organization Studies*, 20, pp 47–74.
- Mehran, H. 1995. Executive Compensation Structure, Ownership, and Firm Performance. *Journal of Financial Economics*, 38(2), pp 163-185.
- Merton, R.K, 1967. *On Theoretical Sociology: Five Essays, Old and New*, Free Press. New York.
- Meyers, L.S., Gamst, G. and Guarino, A.J. 2012. *Applied Multivariate Research: Design and Implementation*. Sage.
- Michel, J.G. and Hambrick, D. C. 1992. Diversification Posture and Top Management Team Characteristics. *The Academy of Management Journal*, 35(1), pp 9-37.
- Milkovich, G. T., Newman J.M., Cole, N. 2007. *Compensation*. McGraw-Hill Ryerson: Toronto, Ontario, Canada.
- Miller, D. and Le Breton-Miller, I. 2006. Family Governance and Firm Performance: Agency, Stewardship, and Capabilities. *Family Business Review*, 19, pp. 73-87.
- Miller, D., Le Breton-Miller, I., Lester, R. H. and Cannella, A. A. Jr. 2007. Are family firms really performers? *Journal of Corporate Finance*, 13, pp. 829-858.
- Miller, D., Le Breton-Miller, I., Lester, R., & Cannella, A. 2005. Family involvement, agency and financial performance in the Fortune 1000. *Working Paper*, HEC Montreal.
- Mintzberg, H. and Waters, J. A., 1985. Strategies, Deliberate and Emergent, *Strategic Management Journal*, 6, pp 257–272.
- Mintzberg, H. 1992. *Structure in fives: Designing effective organizations*. Upper Saddle River, NJ: Prentice Hall.
- Mitchell M., and Lehn, K., 1990. Do bad bidders become good targets? *Journal of Political Economy*, 98, pp 372-397.
- Mitchell, W. 1994. The dynamics of evolving markets: The effects of business sales and age dissolutions and divestitures, *Administrative Science Quarterly*, 39, pp. 575-602.
- Mizruchi, M. 1983. Who controls whom? An examination of the relation between management and boards of directors in large American corporations. *Academy of Management Review*, 8, pp 426-435.

- Mizruchi, M.S and Stearns, L., 1988. A longitudinal study of the formation of interlocking directorates. *Administrative Science Quarterly*, 33, pp 196-210.
- Moldoveanu, M. and Martin, R., 2001, Agency Theory and the Design of Efficient Governance Mechanisms. *Working Paper*, Rotman School of Management, University of Toronto.
- Molz, R. 1988. Managerial domination of boards of directors and financial performance. *Journal of Business Research*, 16, pp 235-249.
- Monks, R.A.G., and Minow, N., 2001. *Corporate Governance*, 2nd Edition. Blackwell Publishing, Oxford, UK; Cambridge, MA.
- Monks, Robert A. G., and Minow, N. 2001. *Corporate Governance*, Oxford, Blackwell Publishing.
- Montgomery, C. A., Thomas, A., & Kamath, R. 1984. Divestiture, market value and strategy. *Academy of Management Journal*, 27, 830-840.
- Morck, R., Percy, M., Tian, G. and Yeung, B., 2005. The Rise and Fall of The Widely Held Firm- A History Of Corporate Ownership in Canada, *Working Paper*, NBER, available online at <http://www.nber.org/papers/w10635>.
- Morck, R., Shleifer, A. and Vishny, R. 1988. Management Ownership and Market Valuation: An Empirical Analysis. *Journal of Financial Economics*, 20, pp 293-315.
- Morck, R.; Shleifer, A., and Vishny, R., 1990. Do Managerial Objectives Drive Bad Acquisitions? *Journal of Finance*, 45(1), pp 31-48.
- Morck, R., Shleifer, A., Vishny, R.W. 1989. Alternative Mechanisms for corporate control. *American Economic Review*, 79, pp 842-852.
- Moyer, R., Chatfield, R. and Sisneros, P. 1989. Security Analyst Monitoring Activity: Agency Costs and Information Demands. *Journal of Financial and Quantitative Analysis*, 24, pp 503-512.
- Mueller, D. C., 1969. A Theory of Conglomerate Mergers. *Quarterly Journal of Economics*, 83, pp 644-660.
- Murphy, K. 1999. Executive Compensation. In O. Ashenfelter and D. Card, eds., *Handbook of Labor Economics*, Vol. 3. Chapter 38, pp 2485-2563. New York: North-Holland.
- Murphy, S. A and McIntyre, M. L. 2007. Board of director performance: a group dynamics perspective. *Corporate Governance*, 7(2), pp. 209-224.
- Myers, S. 2000. Outside Equity. *Journal of Finance*, 55, pp. 1005-1037.

- Myers, S. C. and Majluf, N. 1984. Corporate Financing and Investment Decisions When Firms have Information that Investors do not have. *Journal of Financial Economics*, 13, pp 187-221.
- Myers, S.C. and Majluf, N.S., 1984. Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics*, 13, p 187-222.
- Nahapiet, J., and Ghoshal, S., 1998. Social capital, intellectual capital, and the organizational advantage. *Academy of Management Review*, 23, pp 242-266.
- Nelson, R. R., & Winter, S. G. 1982. *An evolutionary theory of economic change*. Cambridge, MA: Harvard University Press.
- Newman, H. A. and Mozes, H. A. 1999. Does the composition of the compensation committee influence CEO compensation practices? *Financial Management*, 28, pp. 41-53.
- Noda, T. and Bower, J. L. 1996. Strategy Making as Iterated Processes of Resource Allocation. *Strategic Management Journal*, 17, pp 159-192.
- Norburn, D., & Birley, S. 1988. The top management team and corporate performance. *Strategic Management Journal*, 9: 225-237.
- NYSE. 2004 (Updated). The New York Stock Exchange Listed Company Manual, Section 303A Final Rule. www.nyse.com/regulation/listed/1101074746736.html
- O'Sullivan M., 2000. The Innovative Enterprise and Corporate Governance. *Cambridge Journal of Economics*, 24(4), pp 393-416.
- Ocasio, W. 1999. Institutionalized Action and Corporate Governance: The Reliance on Rules of CEO Succession. *Administrative Science Quarterly*, 44(2), pp 384-416.
- O'Reilly, C. A., Main, B. G., & Crystal, G. S. 1988. CEO compensation as tournament and social comparison: A tale of two theories. *Administrative Science Quarterly*, 33, pp. 257-274.
- Orts, E. W., 1992. *Beyond shareholders: Interpreting corporate constituency statutes*. *The George Washington Law Review*, 61(1): 14-135.
- Patton, A., and Baker, J. C. 1987. Why won't directors rock the boat? *Harvard Business Review*, 65(6), pp 10-18.
- Pearce II, J.A. and Zahra, S.A. 1991. The relative power of CEOs and boards of directors: associations with corporate performance, *Strategic Management Journal*, 12, pp 135-153.
- Pearce II, J.A. and Zahra, S.A. 1992. Board composition from a strategic contingency perspective. *Journal of Management Studies*, 29.

- Penrose, E. T. 1959. *The theory of the growth of the firm*. New York: Wiley.
- Peteraf, M. 1993. The cornerstones of competitive advantage. *Strategic Management Journal*, 14, pp 179-191.
- Pettigrew, A. M. and McNulty, T. 1995. Power and Influence in and around the Boardroom. *Human Relations*, 48, pp. 845-873.
- Pettigrew, A.M. 1992. On studying managerial élites. *Strategic Management Journal*, 13, pp 163-182.
- Pettigrew, A.M., & McNulty, T. 1998. Sources and Uses of Power in the Boardroom. *European Journal of Work and Organizational Psychology*, 7(2), pp 197-214.
- Pfeffer, J. 1972 .The size and composition of corporate boards of directors: The organization and its environment. *Administrative Science Quarterly*, 17, pp 218-228.
- Pfeffer, J.1983. Organizational demography, in Cummings, L. L. and Staw. B. M. (eds.), *Research in Organizational Behaviour*, 5, pp 299-357. Greenwich, CT: JAI Press.
- Pfeffer, J. and Salancik, G. 1978. *The External Control of Organizations: A Resource Dependence Perspective*. Harper & Row, New York, NY.
- Picard RR, Berk KN. 1990. Data splitting. *The American Statistician*, Vol.44 (2) pp. 140-7.
- Pitcher, P., & Smith, A. D. 2001. Top management team heterogeneity: Personality, power, and proxies. *Organization Science*, 12: 1-18.
- Popper, K. R. 1972. *Objective knowledge*. Oxford, UK: Oxford University Press.
- Porter, M. 1987. From Competitive Advantage to Corporate Strategy. *Harvard Business Review*, May-June, p. 43.
- Porter, M.E. 1980. *Competitive Strategy*. The Free Press, New York.
- Porter, M.E. 1985. *Competitive Advantage*. The Free Press, New York.
- Powell, W., W. 1996. Interorganizational Collaboration and the Locus of Innovation: Networks of Learning in Biotechnology. *Administrative Science Quarterly*, 41, 1, pp 116-145.
- Prahalad CK, Bettis R.A. 1986. The dominant logic: a new linkage between diversity and performance. *Strategic Management Journal*, 7(6), pp 485-501.
- Prahalad, C. K. and Hamel, G. 1990. The core competence of the corporation. *Harvard Business Review*, 68(3), pp. 79-91.

Pratt, J. W. and Zeckhauser, R. J. (Eds.), 1985, *Principals and Agents: The Structure of Business*. Boston: Harvard Business School Press.

Priem, R. L. & Butler, J. E. 2001b. Is the "Resource-Based View" a Useful Perspective for Strategic Management Research? *Academy of Management Review*, 26(1), pp 22-41.

Putnam, H. 1962. What theories are not. In E. Nagel, P. Suppes, & A. Tarski (Eds.), *Proceedings of the 1962 International Congress* (pp. 240-251). Stanford, CA: Stanford University Press.

Pye, A. 2001. A Study in Studying Corporate Boards over Time: Looking Backwards to Move Forwards. *British Journal of Management*, 12, pp. 33-46.

Rappaport, A. 1999. New Thinking on How to Link Executive Pay with Performance. *Harvard Business Review*. March/April, pp. 91-101.

Ravenscraft, D. J., F. M. Scherer. 1987. *Mergers, Sell-offs, and Economic Efficiency*. Brookings Institution, Washington, DC.

Rhoades, D. L., Rechner, P. L., & Sundaramurthy, C. 2000. Board composition and financial performance: A meta-analysis of the influence of outside directors. *Journal of Managerial Issues*, 12: pp. 76-91.

Rindova V. P., 1999. What Corporate Boards have to do with Strategy: A Cognitive Perspective, *Journal of Management Studies*, 36 (7), pp 953 – 959.

Roberts E. B. and Berry C. A. 1985. Entering new businesses: selecting strategies for success. *Sloan Management Review*, 27, pp 3-17.

Röell, A. A. and Peng, L., 2006. Executive Pay, Earnings Manipulation and Shareholder Litigation. (August). *AFA 2005 Philadelphia Meetings*, Available at SSRN: <http://ssrn.com/abstract=488148>.

Roll, R., 1986. The hubris hypothesis of corporate takeovers. *Journal of Business*, 59, pp 197-212.

Romano, R., 2000. Less Is More: Making Shareholder Activism A Valued Mechanism of Corporate Governance. *Yale Law & Economics Research Paper* No. 241; and Yale ICF Working Paper No. 00-10; Yale SOM Working Paper No. ICF - 00-10. Available at SSRN: <http://ssrn.com/abstract=218650>.

Roquebert, J. A., Phillips, R. P., and Westfall, P. A. 1996. Markets vs. management: What 'drives' profitability. *Strategic Management Journal*, 17, pp. 653-664.

Ruigrok, W., Peck, S., Tacheva, S., Greve, P., and Hu, Y. 2006. The Determinants and Effects of Board Nomination Committees. *Journal of Management Governance*, 10, pp 119-148.

Rumelt, R. P. 1987. Theory, strategy, and entrepreneurship. In D. J. Teece (ed.). *The Competitive Challenge*. Ballinger Publishing, Cambridge, MA, pp 137-158.

Rumelt, R. P. 1991. How much does industry matter? *Strategic Management Journal*, 12, pp 167-185.

Ryan, H. E. And Wiggins, R. A., 2004. Who is in whose pocket? Director compensation, board independence and barriers to effective monitoring. *Journal of Financial Economics*, 73 (3), pp. 497-524.

Sapp, S. G. 2008. The Impact of Corporate Governance on Executive Compensation. *European Financial Management*, 14(4), pp. 710-746.

Saucier Report, 2001, *Beyond Compliance: Building a Governance Culture*, Sponsored by The Canadian Institute of Chartered Accountants, The Canadian Venture Exchange and The Toronto Stock Exchange.

Scanlon, K., J. Trifts, R. Pettway, 1989, Impacts of Relative Size and Industrial Relatedness on Returns to Shareholders of Acquiring Firms, *Journal of Financial Research*, 12.

SCB, 2003, *Navigating Through The Perfect Storm: Safeguards to Restore Investor Confidence*. Standing Senate Committee on Banking, Trade and Commerce.

Schelling, Thomas C., 1978. *Micromotives and Macrobehavior*, New York, W.W. Norton & Company.

Schendel, D. and Hofer, C.W, 1979, *Strategic Management: A new view of business policy and planning*. Little Brown, Boston.

Schulze, W.S., Lubatkin, M.H., Dino, R.N., & Buchholtz, A.K. (2001). Agency relationships in family firms: Theory and evidence. *Organization Science*, 12(2), pp 99-116.

Schweiger, D. M., W. R. Sandberg and P. Rechner, 1989. Experiential effects of dialectical inquiry, devil's advocacy and consensus approaches to strategic decision making, *Academy of Management Journal*, 32, pp. 745-772.

Scott, R. W. 2001. *Institutions and organizations*. Thousand Oaks, CA: Sage.

SEC (2004). Disclosure Regarding Nominating Committee Functions and Communications between Security Holders and Boards of Directors. RIN 3235-AI90.
Selznick, P. 1949. *TVA and the Grass Roots: A Study of Politics and Organization*. Berkeley, University of California Press.

- Selznick, P. 1957. *Leadership in Organizations*. New York: Harper and Row.
- Servaes, H., 1991. Tobin's Q and the Gains from Takeovers. *Journal of Finance*, 46(1), pp 409-419.
- Seth, A., 1990, Sources of Value Creation in Acquisitions: An Empirical Investigation, *Strategic Management Journal*, 11(6), pp 431-446.
- Shen W. 2003. The dynamics of the CEO-board relationship: an evolutionary perspective. *Academy Management Review*, 28, pp 466-76.
- Shivdasani, A. 1993. Board Composition, Ownership Structure and Corporate Control. *Journal of Accounting and Economics*, 16, pp 167-198.
- Shivdasani, A. and Yermack, D. 1999. CEO involvement in the selection of new board members: an empirical analysis. *Journal of Finance*, 54, pp. 1829-53.
- Shleifer A. and Vishny R. 1997. A Survey of Corporate Governance. *Journal of Finance*, 52(2), pp 737-789.
- Shleifer, A. and Vishny R. W. 1989. Management Entrenchment: The Case of Manager-Specific Investments. *Journal of Financial Economics*, 25(1), pp 123-140.
- Shleifer, A., and Vishny, R. 1986. Large Shareholders and Corporate Control. *Journal of Political Economy*, 94, pp 461-488.
- Shmidt, S. L., and Brauer, M. 2006. Strategic Governance: How to assess board effectiveness in guiding strategy execution. *Corporate Governance: An International Review*, 14(1), pp 13-22.
- Short, H. and Keasey, K. 1999. Managerial Ownership and the Performance of Firms: Evidence from the UK. *Journal of Corporate Finance*, 5, pp 79-101.
- Simons, T. 1995. Top management team consensus, heterogeneity, and debate as contingent predictors of company performance: The complementarity of group structure and process. *Academy of Management Best Papers Proceedings*: 62-66.
- Singh H, Montgomery C. 1987. Corporate acquisition strategies and economic performance. *Strategic Management Journal* 8(4), pp 377-386.
- Smith Jr., C. 1986. Investment Banking and the Capital Acquisition Process. *Journal of Financial Economics*, 15, pp 3-29.
- Smith, J. C. W. and Watts, R. L. 1992. The Investment Opportunity Set and Corporate Financing, Dividend, and Compensation Policies. *Journal of Financial Economics*, 32(3), pp 263-292.

Smith, K. G., Smith, K. A., Olian, J. D., Sims, H. P., O'Bannon, D. P., & Scully, J. A. 1994. Top management team demography and process: The role of social integration and communication. *Administrative Science Quarterly*, 39: 412-438.

Smith, M. 1996. Shareholder Activism by Institutional Investors: Evidence from CalPERS. *Journal of Finance*, 51, pp 227-252.

Springer, J. D., 1999. "Corporate Constituency Statutes: Hollow Hopes and False Fears". *1999 Annual Survey of American Law*, pp. 85-128.

Stalk, G., Evans, P., Shulman, L.E., 1992. Competing on capabilities: the new rules of corporate strategy. *Harvard Business Review*, March/April, pp 57-69.

Stein, J. C., 1989, Efficient Capital Markets, inefficient Firms: A model of myopic corporate behaviour. *Quarterly Journal of Economics*, 104, 655-669;

Steyerberg, E.W., Harrell, F.E. Jr., Borsboom, G.J.J.M., Eijkemans, M.J.C., Vergouwe, Y. & Habbema, J.D.F. 2001: Internal validation of predictive models: efficiency of some procedures for logistic regression analysis. *Journal of Clinical Epidemiology*. 54: 774-781.

Stiles, P. and B. Taylor. 2001. *Boards at Work: How Directors view their Roles and Responsibilities*. Oxford University Press, Oxford.

Stulz, R. 1988. Managerial Control of Voting Rights: Financing Policies and the Market for Corporate Control. *Journal of Financial Economics*, 20, pp 25-54.

Subrahmanyam, V., Rangan, N. and Rosenstein, S., 1997. The Role of outside Directors in Bank Acquisitions. *Financial Management*, 26, 3, pp. 23-36.

Sudarsanam, S. 1996. Large Shareholders, Takeovers and Target Valuation. *Journal of Business Finance and Accounting*, 23, pp 295-317.

Sudarsanam, S., 2000. Corporate Governance, Corporate Control and Takeovers, in Cooper C.L and Gregory, A., (EDS), *Advances in Mergers and Acquisitions*, 1, pp 119-155. JAI, Elsevier Science Inc.

Sudarsanam, S., 2003, *Creating Value From Mergers and Acquisitions: The Challenges*. Prentice Hall, Pearson Education Limited. Essex. England.

Sun, J. and Cahan, S. 2009. The Effect of Compensation Committee Quality on the Association between CEO Cash Compensation and Accounting Performance. *Corporate Governance: An International Review*, 17(2), pp. 193-207.

Sundaramurthy C, Lewis M. Control and collaboration: paradoxes of governance. *Academy of Management Review*, 28, pp 397-415.

- Sundaramurthy, C. 1996. Corporate governance within the context of anti-takeover provisions. *Strategic Management Journal*, 17: 377-394.
- Teece D., Pisano G. et Boerner, C. 2002. Dynamic capabilities, competence, and the behavioral theory of the firm. In M. Augier, J.G. March et R.M. Cyert (Coord.), *The Economics of Choice, Change and Organization: Essays in Honor of Richard M. Cyert*. Edward Elgar.
- Teece, D. J. 1987. Technological Change and the Nature of the Firm. In D. Teece (ed.), *The Competitive Challenge*. Harper & Row, New York, pp. 256-281.
- Teece, D.J., Pisano, G., & Shuen, A. 1997. Dynamic Capabilities and Strategic Management. *Strategic Management Journal*, 18, 7, pp. 509-533.
- Teece, D.J., Rumelt, R., Dosi, G. and Winter, S. 1994. Understanding corporate coherence: Theory and evidence. *Journal of Economic Behavior & Organization*, 23, pp1-30.
- Teece, David J. 1982, Towards an Economic Theory of the Multiproduct Firm. *Journal of Economic Behavior and Organization*, 3, pp. 39-63.
- Tehrani, H., Travlos, N. G., Waegelin, J. F., & Johnson, J. W. 1987. Management compensation contracts and merger-induced abnormal returns: Discussion. *Journal of Accounting Research*, 25, pp. 51-84.
- Thompson D. J. 1967. *Organizations in Action*. McGraw Hill, New York.
- Thompson, R. B. and Thomas, R. S., 2004. The New Look of Shareholder Litigation, Acquisition-Oriented Class Actions. *Vanderbilt Law Review*, 57, pp 131-209.
- Tirole, J. 2006. *The Theory of Corporate Finance*. Princeton University Press.
- Tolbert, P. S., and Zucker, L. 1983. Institutional sources of change in the formal structure of organizations: The diffusion of civil service reform, 1880-1935. *Administrative Science Quarterly*, 28, pp 22-39.
- Toronto Stock Exchange (TSE), 2002, Corporate Governance Policy-Proposed New Disclosure Requirement and Amended Guidelines.
- Tosi, H. L. and Gomez-Mejia, L.R. 1989. The decoupling of CEO pay and performance: An agency theory perspective. *Administrative Science Quarterly*, 34, pp 169-189.
- Tosi, H. L., Katz, J. P., & Gomez-Mejia, L. R. 1997. Disaggregating the agency contract: The effects of monitoring, incentive alignment, and term in office on agency decision making. *Academy of Management Journal*, 40, pp 584-602.

- Tosi, H., Werner, S., Katz, J. and Gomez-Mejia, L., 2000. How Much Does Performance Matters? A Meta-Analysis of CEO Pay Studies. *Journal of Management*, 26(2), pp 301-339.
- Travlos NG. 1987. Corporate takeover bids, methods of payment, and bidding firms' stock returns. *Journal of Finance*, 42, pp 943-963.
- Travlos, N.G., 1987. Corporate takeover bids, methods of payment, and bidding firms' stock returns. *Journal of Finance*, 42(4), pp 943-963.
- Tsui, A. S., & O'Reilly, C. A. 1989. Beyond simple demographic effects: The importance of relational demography in superior-subordinate dyads. *Academy of Management journal*, 32: 402-423.
- Turely, S. And Zaman, M. 2007. Audit Committee Effectiveness: Informal processes and behavioural effects. *Accounting, Auditing & Accountability Journal*, 20(5), pp. 765-788.
- Vafeas, N. 2003. Length of board tenure and outside director independence, *Journal of Business Finance & Accounting*, 30(7/8), pp.1043-64.
- Vafeas, N., 1999. The Nature of Board Nominating Committees and their Role in Corporate Governance. *Journal of Business Finance & Accounting*, 26(1), pp 199-225.
- Vafeas, N., 2000. The Determinants of Compensation Committee Membership. *Corporate Governance: An International Review*, Vol. 8(4), pp.356-366.
- Vafeas, N., 2005, Audit committees, boards and the quality of reported earnings. *Contemporary Accounting Research*, 22, pp.1093-1122.
- Van den Berghe, L. A. A. and Levrau, A. 2004. Evaluating Boards of Directors: What Constitutes a Good Corporate Board? *Corporate Governance: An International Review*, 12, pp. 461-478.
- Vance, S. C. 1983. *Corporate leadership: Boards, directors and strategy*. New York: McGraw-Hill.
- Vance, S.C. 1983. *Corporate leadership: Boards, directors, and strategy*. New York: McGraw-Hill.
- Varaiya, N.P. 1987. Determinants of premiums in acquisition transactions. *Managerial and Decision Economics*, 14, pp. 175-184.
- Villalonga, B. And Amit, R. 2006. How do family ownership, control and management effect firm value? *Journal of Financial Economics*, 8, pp. 385-417.
- Wade, J., O'Reilly, C. A. and Chandratat, I. 1990. Golden parachutes: CEOs and the exercise of social influence. *Administrative Science Quarterly*, 35, pp. 587-603.

Waldo, C. H. 1985. *Boards of directors: Their changing roles, structure, and information needs*. Westport, CT: Quorum.

Walsh, J. P. and J. K. Seward. 1990. On the efficiency of internal and external corporate control mechanisms, *Academy of Management Review*, 15, pp 421-458.

Walsh, J. P., and Kosnik, R. D. 1993. Corporate raiders and their disciplinary role in the market for corporate control. *Academy of Management Journal*, 36, pp 671-700.

Warner, J.B., Watts, R., Wruck, K., 1988. Stock prices and top management changes. *Journal of Financial Economics*, 20, pp 461-492.

Weech-Maldonado, R., 2002, Strategic Relatedness in Mergers and Financial Performance: The Case of the Health Maintenance Organization Industry in the United States, *Health Services Management Research* 15.

Weisbach, M. 1988. Outside Directors and CEO Turnover. *Journal of Finance*, 20, pp 431-460.

Weisbach, Michael S. & Benjamin E. Hermalin, 2000. Boards of Directors as an Endogeneously Determined Institution: A Survey of the Economic Literature. Working paper 2000. SSRN. <http://papers.ssrn.com/abstract=233111>

Wernerfelt, B. 1984. A resource-based view of the firm. *Strategic Management Journal*, 5, pp 171-180.

Wernerfelt, B. 1989. From critical resources to corporate strategy. *Journal of General Management*, 5, pp. 171-180.

Wernerfelt, B., 2005, Product Development Resources and the Scope of the firm, *Journal of Marketing*, 69(2), pp15-32.

Weston, J.F., Chung, K.S. and Siu, J., 1998, *Takeovers, Restructuring and Corporate Governance*, 2nd Edition, Prentice Hall.

Westphal JD, Zajac EJ. 1998. Symbolic management of stockholders: corporate governance reforms and shareholder reactions. *Administrative Science Quarterly*, 43, pp.127-153.

Westphal, J. D. 1999. Collaboration in the Boardroom: Behavioural and Performance Consequences of CEO-Board Social Ties. *Academy of Management Journal*, 42, pp 7-24.

Westphal, J. D. And Zajac, E. J. 1995. Who Shall Govern? CEO/Board Power, Demographic Similarity and New Director Selection. *Administrative Science Quarterly*, 40(1), pp 60-83.

- Westphal, J. D., 1998. Board Games: How Ceo's Adapt to Increases in Structural Board Independence from Mangagement. *Administrative Science Quarterly*, 43(3), pp 511-537.
- Westphal, J. D., and Zajac, E. J. 1994. Substance and symbolism in CEOs' long-term incentive plans. *Administrative Science Quarterly*, 39, pp 367-390.
- Westphal, J. D., Seidel, M. D. L., & Stewart, K. J. 2001. Second-order imitation: Uncovering latent effects of board network ties. *Administrative Science Quarterly*, 46(4), pp 717-747.
- Wheelen, T. L., & Hunger, J. D. (2005). *Strategic management and business policy* (10th ed.). Upper Saddle River, NJ: Prentice Hall.
- Wiersema, M. F., & Bantel, K. A. 1992. Top management team demography and corporate strategic change. *Academy of Management Journal*, 35: 91-121.
- Williams, M.A., Michael, T.B., and Rao, R.P. (2008). Bank mergers, equity risk incentives, and CEO stock options. *Managerial Finance*, 34(5), pp. 316-327.
- Williamson, O. 1971. The Vertical Integration of Production: Market Failure Considerations. *American Economic Review*, 61, pp 112-123.
- Williamson, O. 1975. *Markets and Hierarchies: Analysis and Antitrust Implications*. New York: Free Press.
- Williamson, O. E. 1999. Strategy Research: Governance and Competence Perspectives. *Strategic Management Journal*, 20(12), pp 1087-1108.
- Williamson, Oliver E. 1975. *Markets and Hierarchies: Analysis and Antitrust Implications*. NewYork: Free Press.
- Winter, S. 2003. Understanding Dynamic Capabilities. *Strategic Management Journal*, 24, pp 991-995.
- Wright, P., Kroll, M., Lado, A., and Van Ness, B., 2002. The Structure of Ownership and Corporate Acquisition Strategies. *Strategic Management Journal*, 11(1), pp. 41-53.
- Xie, B., W. Davidson, and P. DaDalt, 2003, Earnings management and corporate governance: the role of the board and audit committee. *Journal of Corporate Finance*, 9, pp. 295-316.
- Yen, T. Y. And André, P. 2007. Ownership structure and operating performance of acquiring firms: The case of English-origin countries. *Journal of Economics and Business*, 59(5), pp. 380-405.

- Yermack, D. 1996. Higher Market Valuations for Firms with a Small Board of Directors, *Journal of Financial Economics*, 40 (2), pp.185–211.
- Yermack, D., 1995. Do Corporations Award CEO Stock Options Effectively? *Journal of Financial Economics*, 39, pp 237-269.
- Yuce, A. and Ng, A., 2005. Effects of Private and Public Canadian Mergers, *Canadian Journal of Administrative Sciences*, 22(2), pp 111-124.
- Zahra, S. A., & Pearce, J. A. 1989. Boards of directors and corporate financial performance: a review and integrative model. *Journal of Management*, 15(2), pp 291-334.
- Zahra, S.A. and Pearce, J.A., 1989. Boards of Directors and corporate financial Performance: A review and integrative Model. *Journal Of Management*, 15, pp 291-244.
- Zajac, E. J. 1990. CEO selection, succession, compensation and firm performance: A theoretical integration and empirical analysis. *Strategic Management Journal*, 11, pp. 217-230.
- Zajac, E. J., and Westphal, J.D. 1995. Accounting for the explanations of CEO compensation: Substance and symbolism. *Administrative Science Quarterly*, 40, pp 283-308.
- Zollo M, Winter SG. 2001. Deliberate learning and the evolution of dynamic capabilities. *Organization Science*, 13, pp 339–351.
- Zucker, L. G. 1987. Institutional theories of organization. *Annual Review of Sociology*, 13, pp 443-46.